Foreword

The Ministry of Economic Affairs is pleased to publish the Diagnostic Trade Integration Update (DTISU), initiated in December, 2019. Despite the challenges posed by the COVID-19 Pandemic, the Ministry in collaboration with the United Nations Development Programme has conducted the DTISU exercise successfully and been able to come up with a comprehensive and actionable DTISU document. The first Diagnostic Trade Integration Study (DTIS) was published in 2012 and the study has been an important guiding document for trade policy and other trade-related interventions for the Royal Government thus far.

Bhutan’s economy has been growing steadily since the launch of the first DTIS. However, the economy has been severely disrupted by the COVID-19 pandemic and is likely to take time for its full recovery. Without timely and appropriate interventions, the disruption will not only derail the economic trajectory, but, also impact Bhutan’s smooth transition from the least developed to developing country category. Therefore, the DTISU is a timely intervention that will not only aid Bhutan’s economic recovery and graduation from the Least Developed Country (LDC) category but also help in realizing Bhutan’s economic self-reliance in the long run.

In a nutshell, the DTISU provides a clear analysis of the new priorities and challenges ahead for the growth of the Bhutanese economy with the Ministry of Economic Affairs at the forefront and specific action plans for relevant stakeholders. The study, in particular, underscores the instrumental role of trade facilitation and trade agreements in creating a favourable trading environment for Bhutan with clear analysis of Bhutan’s trade competitiveness factors and long-term policy recommendations.

Further, the study provides insights into the smooth transitioning of Bhutan from the LDC category and on the impact of the COVID-19 pandemic on Bhutan's economy. The study also highlights the importance of driving economic growth through digitalization for the Bhutanese economy with detailed analysis of Bhutan’s position in the digital economy and the Fourth Industrial Revolution in realizing His Majesty the King’s vision of leading Bhutan towards a Digital Drukyl. The need to foster new skill-oriented industries, the importance of the emerging digital economy and services sector and facilitating the entry of Bhutanese businesses into global markets through e-commerce are also highlighted in the study.

The Ministry of Economic Affairs wishes to thank and acknowledge the invaluable inputs and contributions made by all agencies and Individuals in coming up with this very important diagnostic study. I am sure that the study will be beneficial for trade and other relevant sectors for policy interventions in support of the current Five Year Plan and beyond and the 21st Century Economic Roadmap. Finally, I am confident that, with the guidance of His Majesty the King, Bhutan will overcome the adverse impact of the pandemic and continue its journey of steady, sustainable and remarkable economic growth.

I wish for and look forward to a successful implementation of the DTISU.

Mr Loknath Sharma
Minister
Ministry of Economic Affairs
Foreword

Bhutan joined the United Nations in 1971 as a Least Developed Country (LDC), the same year the United Nations created the LDC category. Today, 50 years later, Bhutan is preparing to graduate from LDC status by 2023.

Over the last half-century, Bhutan has made impressive economic, social and environmental gains through a series of five-year development plans. Per capita incomes have grown, poverty has been reduced, and Gross National Happiness (GNH) has consistently risen. The country’s Human Development Index value has increased by 25 percent between 2005 and 2019, and life expectancy at birth has increased from 65 to 71 years. Poverty rates dropped from 23 percent to 8 percent in just over a decade. Bhutan today is considered a global leader in environmental conservation. It has a constitutional mandate to maintain at least 60 percent of the country under forest cover at all times and has made an international pledge to remain carbon-neutral in perpetuity.

However, its development progress still faces structural challenges and risks, which have been aggravated by the COVID-19 pandemic. While the Bhutanese economy has seen significant structural changes over decades of planned development—moving from primary towards secondary and tertiary sectors—such structural change and robust growth have not translated into a corresponding increase in secondary and tertiary sector jobs over the years. The pandemic not only had dramatic consequences for tourism and related service sectors but also for the broader economy, such as for employment and private sector diversification. While the Royal Government of Bhutan (RGoB)’s strong public health response and economic recovery efforts have helped cushion some of the worst effects, as Bhutan plans its post-COVID-19 economic future, it faces both long-standing and new challenges—including realizing green and inclusive economic transformation. Overcoming these challenges will be central to Bhutan’s future.

The Diagnostic Trade Integration Study Update (DTISU 2020) aims to contribute to addressing these challenges. Since the first DTIS in 2012, Bhutan has accelerated its march towards a new economy guided by both the 11th and 12th Five Year Plans. While a range of reforms and policies have been enacted to support a strengthened private sector and enhance trade, there remains space for further action.

The DTISU 2020 reviews Bhutan’s progress since 2012. It assesses the implementation of earlier recommendations, identifies challenges encountered since the last study, and considers the new economic landscape. The DTISU also builds on plans and strategies adopted by the RGoB in recent years and takes into account plans for transitioning from the LDC category by 2023.

UNDP sincerely hopes that this study, its recommendations, and its monitoring framework will support Bhutan as it recovers from the COVID-19 pandemic and defines new approaches to the economy and trade. The DTISU thus lays out a comprehensive agenda for action that is relevant to both the current moment and Bhutan’s economic future. This includes specific suggestions for developing the green economy, strengthening youth skills development for the 21st century, enhancing trade-related infrastructure and logistics, developing cottage and small industry (CSI) and increasing their competitiveness, promoting Bhutanese exports and foreign investment into Bhutan, and leveraging digitalization and e-commerce to support inclusive business and trade. These are all fundamental steps for attaining the 2030 Agenda for Sustainable Development.

What is critical going forward is the commitment to follow up action and the implementation of priority recommendations. The report thus also defines a monitoring framework to help assess progress over time and support adaptation as needed, based on changing circumstances.
UNDP stands committed to supporting the implementation of this important agenda and looks forward to deepening our partnership with the RGoB.

The DTISU 2020 would not have been possible without the close collaboration between Bhutan’s Ministry of Economic Affairs (MoEA) and UNDP. Its development was particularly supported by the National Implementation Unit at the Department of Trade, MoEA, and by the Main Implementing Entity (MIE) in UNDP. This initiative has also relied heavily on cooperation with the Enhanced Integrated Framework (EIF) Focal Point, and the full EIF National Steering Committee. Finally, the DTISU 2020 has benefited from the technical input of more than 100 stakeholders, including the expert drafting team from various UN agencies and affiliated agencies. While we cannot thank all our collaborators individually here, we recognize their critical role in making this report possible.

Ms Azusa Kubota  
Resident Representative  
UNDP Bhutan
Developing evidence-based policy and regulatory frameworks for trade and investment is a central component of the EIF Strategic Plan, contributing towards the goal of an improved trade environment for inclusive and sustainable growth in the least developed countries (LDCs). At the heart of these efforts are the Diagnostic Trade Integration Studies (DTISs). Over the past years, DTISs have continued to enable the LDCs to identify trade-related constraints, opportunities and to develop institutional and productive sector capacity-building projects to address them. DTISs provide the necessary evidence to develop sound policies, while also serving as a reference point to mobilize resources from donors and the private sector. This DTIS Update (DTISU) of Bhutan adds to a list of 54 DTISs and DTISU that have so far been supported by the EIF.

The significance of this DTISU is underscored by the context in which it was undertaken, with the concept note approved shortly before the World Health Organization declared COVID-19 a global pandemic. Following the recommendations of the Executive Secretariat for the EIF, the DTISU has reflected the impacts of the COVID-19 pandemic in all chapters. The successful and timely completion of the analysis is also commendable given the COVID-19-related challenges and Bhutan’s impending graduation from the LDC category. While the COVID-19 pandemic has had a negative impact across sectors, it has created a window of opportunity for Bhutan to accelerate its efforts in establishing a digital ecosystem, not only as an immediate response to the crisis, but also to build resilience to future crisis and as it transitions to the Fourth Industrial Revolution. The widespread integration of digital solutions across the nation’s priority sectors would be key.

In the last decade, Bhutan has made significant progress in economic growth. Its gross national income per capita is estimated at USD 2,982 in 2021, which is almost more than double the graduation threshold. This feat was achieved on the back of an impressive gross domestic product growth, which has averaged 6.15% per year since 2010. However, Bhutan’s export concentration remains high, and hence diversification beyond hydropower in areas such as the services sector and tourism has been highlighted as essential in this DTISU. Constraints on productive capacity and productivity in the domestic market as well as critical skill shortages are particularly highlighted. As a landlocked LDC, improving trade facilitation and infrastructure support in Bhutan will help reduce trade costs. Additional key areas spotlighted by this DTISU include improvements to the business climate and access to finance, the importance of standards and quality infrastructure, and the significance of investment promotion and tourism support services.

All chapters of this DTISU include recommendations and projects that can be implemented in the short, medium and long term, and are aligned with Bhutan’s 12th Five-Year Plan. Mobilizing support from development partners in these critical priority areas will be vital, not only for the success of these projects and recommendations, but also to lay a strong foundation for sustainable development in the future, as Bhutan graduates from the LDC category in 2023. The EIF reaffirms its commitment to support Bhutan in its resource mobilization efforts towards these priority areas. This will build on the USD 1.9 billion that has already been invested by development partners, governments, and private sector actors towards DTIS priorities across several EIF Countries.
We would like to express our immense appreciation to the Royal Government of Bhutan, the EIF National Implementation Unit at the Department of Trade of the Ministry of Economic Affairs, and the United Nations Development Programme for their commendable efforts and exemplary partnership leading to the successful completion of this DTISU, despite the challenging implementation context.

The EIF stands ready to continue strengthening the partnership to support Bhutan in the implementation of the DTISU priorities and on its path to an improved and inclusive trade environment for sustainable development.

Dr Ratnakar Adhikari
Executive Director
Executive Secretariat for the EIF
Acknowledgments

The DTISU 2020 team extends its special thanks to His Excellency Lyonpo Loknath Sharma, Minister of Economic Affairs (MoEA), Royal Government of Bhutan (RGoB), for his guidance, availability and unflattering support for the completion of this work. The team is also grateful to the Enhanced Integrated Framework (EIF) Focal Point and to the EIF National Steering Committee members for their cooperation.

National Steering Committee

The 20-member National Steering Committee (NSC) was created in 2011 and is chaired by the Secretary, MoEA and comprised of representatives from relevant government organizations and the United Nations Development Programme (UNDP) as the donor facilitator. Its main functions include mainstreaming trade in development programmes, facilitating coordination with relevant organizations within and outside the RGoB and approving project proposals for submission to the EIF for approval of funding.

In order not to create parallel structures, the National Implementation Unit (NIU) and UNDP relied on the NSC to provide a governance framework for the DTISU 2020. The Bhutan EIF National Steering Committee guided the DTIS update process, from the concept note preparation to the final validation of the report and action matrix. Members of the Committee provided invaluable comments, direction, encouragement and input to the DTISU team. They ensured that the DTISU is aligned with the government's development plans, in particular the 12th Five Year Plan and the 21st Century Economic Roadmap concept.

DTIS update team

The DTIS update team comprised of nine consultants (national and international) and two UN agencies leading the study on various chapters. The team’s appreciation goes as to the National Implementation Unit at the Department of Trade, Ministry of Economic Affairs for their unwavering logistical support during the entire process.

The Main Implementing Entity (MIE) for the DTISU was the United Nations Development Programme (UNDP) who was involved from the preparation of the concept note and recruitment and management of national and international consultants to the validation of the final report.

The strategy benefited from contributions from more than 100 stakeholders, including resident development partners in and outside Bhutan, who took part in face-to-face as well as virtual meetings organized as part of the DTISU formulation. While it is not possible to thank them all individually here, the team recognizes their critical role in the process, without which the DTISU would not have been possible.

See Annexure for details of NSC and DTISU team.

Ministry of Economic Affairs (MoEA) (Department of Trade (DoT), Department of Industry (DoI), Department of Cottage and Small Industry (DCSI), Department of Intellectual Property (DIP), Policy and Planning Division (PPD), Administration and Finance, and Information and Communication Technology), Royal Monetary Authority (RMA), Gross National Happiness Commission (GNHC), Bhutan Agriculture and Food Regulatory Authority (BAFRA), Department of Revenue and Customs (DRC), Bhutan Standards Bureau (BSB), Ministry of Finance (MoF), Ministry of Foreign Affairs (MFA), Department of Information Technology and Telecom (DITT), Tourism Council of Bhutan (TCB), Royal Securities Exchange of Bhutan (RSEB) and United Nations Development Programme (UNDP).
The DTISU 2020 formulation was made possible thanks to financial support from the Enhanced Integrated Framework (EIF), and the technical support of Dr Ratnakar Adhikari, Executive Director, and Ms Hang Tran, Senior Coordinator, EIF Executive Secretariat. UNESCAP (Chapter 1) and UNIDO (Chapter 9) provided staff and/or consultants to support these respective chapters. The inputs provided by Mr Marc Auboin, Counsellor, WTO, on trade finance (Chapter 4) and by Ms Alexandra Golovko, International Trade Centre (ITC), on creative industries (Chapter 7) helped improve the quality and depth of these chapters.

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For the purpose of this report and the consolidated action matrix, the following exchange rates were used:

USD 1 = BTN 73.5
BTN 1 = USD 0.0135
BTN 100 = USD 1.35
BTN = Bhutanese ngultrum
USD = United States dollar
### Abbreviations and acronyms

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<th>ABI</th>
<th>Association of Bhutanese Industries</th>
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<td>Association of Bhutanese Tour Operators</td>
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<td>Bhutan Automated Customs System</td>
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<td>Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation</td>
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<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
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<td>US</td>
<td>United States</td>
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<td>USD</td>
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<td>WAIPA</td>
<td>World Association of Intellectual Property Agencies</td>
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<td>WBG</td>
<td>World Bank Group</td>
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<td>WCO</td>
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<td>Acronym</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>SEZ</td>
<td>Special Economic Zone</td>
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<td>SFL</td>
<td>Super Fab Lab</td>
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<td>SMEs</td>
<td>Small and Medium Enterprises</td>
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<td>SMTQ</td>
<td>Standards, Metrology, Testing and Quality</td>
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<td>Sanitary and Phytosanitary</td>
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<td>WITS</td>
<td>World Integrated Trade Solution</td>
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<td>YDF</td>
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<td>YELP</td>
<td>Youth Engagement and Livelihood Programme</td>
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In line with recommendations from the Ministry of Economic Affairs (MoEA) and the Gross National Happiness Commission (GNHC), and in adhering to the principles contained in the Enhanced Integrated Framework (EIF) 2019–2022, the Diagnostic Trade Integration Study Update (DTISU) 2020 was guided by four principles:

1. **Build on plans and strategies adopted by the Royal Government of Bhutan (RGoB)** in recent years and take into account the transition towards graduation from the United Nations Least Developed Country (LDC) category by December 2023. Since the first edition of the Diagnostic Trade Integration Study (DTIS) of Bhutan in 2012, the country has accelerated the march towards economic self-reliance, as described in the Vision 2020, 11th Five Year Plan (FYP) (2013–2018), the 12th Five Year Plan (2018–2023) and the RGoB Flagship Programmes. The DTISU 2020 recognizes that the strengths, weaknesses, opportunities and threats identified in 2012 have changed and new priorities and needs have emerged. Equally important, the DTIS update ensures that actions found in the 17 National Key Results Area (NKRA) are reflected and, whenever possible, benchmarked in the DTISU action matrix. Finally, as the 17 NKRAs found in the 12th FYP are closely aligned with the Sustainable Development Goals (SDGs), with targets and indicators integrated into the 12th FYP, the DTISU seeks to ensure that proposed actions contribute to reaching the SDGs, in particular those priorities in the 12th FYP.

2. **Engage key stakeholders**—government, private sector, development partners and civil society groups—in all steps, from the scoping mission to the operationalization of the DTISU roadmap. To prepare the various chapters, the United Nations Development Programme (UNDP) and the Department of Trade (DoT) sought cooperation from various line ministries and government bodies that were associated with the formulation and implementation of DTIS 2012 as well as various development partners that have supported the implementation of the 2012 action matrix over the past few years. A key result of this is that the Bhutan public, private stakeholders and development partners have been kept informed of the objectives of the DTIS. The Bhutan Chamber of Commerce and Industry (BCCI), the Bhutan Exporters Association (BEA), the Handicraft Association of Bhutan, and the Bhutanese Association of Women Entrepreneurs (BAOWE) took part in key focus-group discussions organized in the context of the DTISU. This ensured that DTISU business-related recommendations are realistic and practical, reflecting the growing role of domestic and foreign direct investment and decreasing the role of Official Development Assistance (ODA) in shaping Bhutan’s trade development, moving from Aid-for-Trade towards Investment-for-Trade. Efforts were made to keep development partners informed and involved in the process. In that context, consultations were held during the scoping mission and prior to the technical validation in November 2020 with UNDP, the Asian Development Bank (ADB), World Bank (WB), United Nations Conference on Trade and Development (UNCTAD), United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations Industrial Development Organization (UNIDO) and World Trade Organization (WTO), in addition to the EIF Executive Board members.

3. **Ensure value for money throughout the formulation of the DTISU while preserving the unique heritage, environment and culture of Bhutan.** To provide a relevant focus to policymakers, the DTISU 2020 paid particular attention throughout each chapter to priorities central to RGoB actions. This includes limiting the negative impact of trade-related activities on the environment, embracing the use of information and communication technology (ICT) by all segments of the population with a focus on women and youth, and promote local expertise whenever available. Efforts were deployed by the DTISU team to limit unnecessary travel and to reduce any additional workload on RGoB officials.
4. **Consider the impact of the COVID-19 pandemic** on Bhutan’s economic development in general and trade policy options in coming years, in particular with regard to the well-designed road to LDC graduation. The DTISU concept note prepared in November 2019 and validated by MoEA had to be changed midway to ensure the DTISU reflected the challenges faced by trade stakeholders, from micro, small and medium-sized enterprises (MSMEs) to cottage and small industries (CSIs), from government to civil society, and from investors to importers and exporters. Each chapter contains a short description of the pandemic’s impact on that area or sector in the coming months and years and describes actions taken by the RGoB and businesses to mitigate it. This also responds to the guidance note prepared by the EIF Executive Secretariat (ES) in June 2020.
The DTISU 2020 concept note and the corresponding Terms of Reference were approved in December 2019, prior to the World Health Organization (WHO) declaring COVID-19 a global pandemic. Given the economic impact of the pandemic, and in following the guidelines provided by the EIF Executive Secretariat, the DTISU team was tasked with reflecting on the possible impact of the COVID-19 pandemic in all chapters and for the subsequent implementation of the chapters’ recommendations.

The first COVID-19 case in Bhutan was confirmed in March 2020 and the RGoB immediately banned all tourists from entering the country. A first lockdown was ordered in August 2020, followed by a second one in December 2020. This has clearly had a devastating impact on all travel- and tourism-related firms, many of which are cottage and small industries (CSIs) as well as small traders. But the impact of the pandemic and the response of Bhutan and neighbouring countries to the crisis has created a ripple effect of challenges across most small businesses.

The National Preparedness and Response Plan for the Outbreak of the Novel Coronavirus (COVID-19) was implemented by the Ministry of Health in February 2020. In May 2020, the National Statistics Bureau and UNDP Bhutan launched the report on the “Rapid Socio-Economic Impact of the COVID-19 on Bhutan’s Tourism Sector”. A Private Sector Task Force for COVID-19 was set up to address the immediate needs of the private sector. A National Resilience Fund of BTN 30 billion was established to support the “Comprehensive National Response to the Challenges of the COVID-19 Pandemic”.

Fiscal and monetary policies were launched to boost economic activities and sustain growth and employment. The Prime Minister’s Office created an Economic Contingency Plan (ECP) document. One key component of the ECP is a “Build Bhutan” project to professionalize the existing gaps in the workforce in the construction sector. Other initiatives are to diversify cultural tourism and encourage farming and livestock production.

The RGoB has also introduced monetary and fiscal interventions to support the private sector. The deferment of loans for one year without interest penalties has been approved. To promote business continuity, new soft-term bridging loans at a concessional interest rate of 5 percent for businesses were provided. The National CSI Development Bank put in place loans for agriculture at a 2 percent interest rate and soft loans to CSIs at 4 percent. The RGoB, to boost demand and increase economic activities, will front-load capital investments. The guidelines for distribution of funds are currently being put in place.

The Druk Gyalpo’s Relief Kidu (DGRK), a programme of His Majesty the King Jigme Khesar Namgyal Wangchuck, aims to provide relief to the Bhutanese people. It has granted about BTN 1.4 billion to 34,384 individuals (including child support Kidu of BTN 50.2 million) as of November 2020. The relief fund has been extended until March 2021 as an income support measure to affected individuals.

The DGRK will continue to alleviate interest payments with a full interest waiver granted from April to September 2020. This will be followed by a partial interest waiver (50 percent) for

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an additional six months from October to March 2021. The interest waiver from His Majesty’s fund will benefit 11,024 individuals across 20 dzongkhags with existing personal and business loans. The total cost of the interest payments for the period of nine months is estimated at BTN 7.5 billion and will be granted from the National Resilience Fund.\textsuperscript{3}

The impact on micro, small and medium-sized enterprises (MSMEs) in Bhutan is clearly shattering. Recognizing the vulnerability of MSMEs, the RGoB has put in place direct fiscal and monetary measures to support their viability. However, as most of the micro and small enterprises in the country function informally, the measures put in place in terms of interest waivers might not directly address micro enterprises. DCSI has recommended nine small and medium enterprises to receive working capital support under the Term-Based Soft Working Capital Loan introduced as an interim measure to counteract the impacts of COVID-19. Its impacts on CSIs showed that the sector must invest in digital technologies to address their vulnerability.

Given the international trade landscape of Bhutan, the ongoing COVID-19 pandemic has also posed immense risks and challenges to the cross-border regulatory and law enforcement agencies. The impact of suspension of cross-border trade and transit on MSMEs for trading enterprises in Bhutan was considered minimal due to government interventions that ensured the flow of essential goods. However, the shortage of construction labour and skilled labour from India due to the suspension of cross-border transit affected the construction sector considerably.

On a positive note, the crisis has led to high-level border coordination and cooperation among all the border agencies, not only in Bhutan but globally as well. Due to the immense risk posed by COVID-19 and the strategic role that customs plays in the international trade supply chain, greater responsibility has been bestowed upon customs to safeguard one’s nation at all costs. Under such conditions and given limited resources and technology advancement, Bhutan Customs has initiated innovative measures to minimize risks. Zero-contact customs clearance procedures have been considered at the land borders where a huge volume of consignments and goods are brought into the country in foreign transport and carriers with foreign drivers.

The pandemic serves as a reminder that Bhutan is part of the global economy, with heavy reliance on outside markets to survive and thrive. More certainty on the rules of trade could cushion future non-health economic shocks.

The Royal Government of Bhutan is putting in place every measure necessary to safeguard the people of Bhutan from the COVID-19 pandemic and the coronavirus. This includes ensuring that all Bhutanese have access to timely and correct information from the government to take all the necessary precautions. All information on the Royal Government of Bhutan’s actions to fight COVID-19 can be found here: https://www.gov.bt/covid19/
EXECUTIVE SUMMARY

Bhutan has maintained solid growth and macroeconomic stability since 2012. Hydropower construction and supportive fiscal and monetary policy have contributed to solid, sustained growth. Single-digit inflation, a stable exchange rate and accumulating international reserves attest to the stability of the economy. As a result, Bhutan has become a lower-middle income country and poverty has been cut by two thirds in the last decade. The average annual growth of Gross Domestic Product (GDP) has been 7.5 percent since the early 1980s. GDP per capita doubled between 2004 and 2014 whereas the poverty rate fell to 9.9 percent in 2019. Bhutan also has a strong track record of reducing poverty and boosting shared prosperity, primarily supported by the state, which has played a large role in the country’s development accomplishments.

Bhutan has been one of the fastest growing economies in the world. Bhutan is also the first country using the Gross National Happiness (GNH) index to measure the well-being of its population, not only based on economic indicators, but also on other factors summarized in the four GNH pillars: sustainable and equitable socio-economic development, environmental conservation, preservation and promotion of culture, and good governance.

Bhutan’s economy continues to be dominated by hydropower and its economic relationship with India and remains highly dependent on India for trade, money and technology. Approximately 80 percent of Bhutan’s imports are from India, and the Bhutanese ngultrum is pegged to the Indian rupee. Services remain the main driver of growth on the supply side, and wholesale and retail trade has emerged as the key contributing subsector. However, the dependence on hydropower has resulted in a weak private sector and has also created macroeconomic vulnerabilities.

Developments in the hydropower sector have also contributed to a narrowing of the current account deficit to 16.3 percent of GDP in FY2019, as exports from the Tala plant expanded after the conclusion of maintenance work. At the same time, tourist arrivals increased by 8 percent in FY2019, contributing to the growth of service exports. The current account deficit was primarily financed through capital inflows from Overseas Development Assistance. Foreign exchange reserves cover about 10.1 months of imports.

The country’s economy is state driven. State-owned enterprises (SOEs) operate in most sectors such as manufacturing, energy, natural resources, financial, communications, aviation, trading and real estate. The strong presence of SOEs inhibits a level-playing field for private investments and discourages them from participating in these sectors. The complex institutional environment and irregular inter-ministerial cooperation hinder the mainstreaming of trade-related issues, which results in measures being reactive rather than proactive.

*Bhutan 2020: A Vision for Peace, Prosperity and Happiness* emphasizes the importance of private sector development and decentralization. Since its Sixth Five Year Plan (1987–1992), Bhutan has encouraged the participation of the private sector in the country’s economy. However, it is still a minor player. The SOEs and the nascent private sector have not been able to transform the country’s infrastructure; this is a big challenge due to the country’s topography.
Despite having a range of potentially competitive products, export performance for Bhutan’s CSI sector is weak. In part, the challenges are practical: difficulties in meeting standards and regulations in possible export markets, an inability to get products certified within Bhutan, high costs (especially transport), limited trade facilitation, and a lack of information and communications technology (ICT) adoption and of e-commerce and digital platform opportunities to expand into overseas markets.

Despite the recent macroeconomic progress, Bhutan continues to face challenges, where living conditions are made difficult by hilly areas and low-quality infrastructure, an underdeveloped private sector and a high youth unemployment rate. Since 2012, little progress was observed in the labour market as labour force participation fell from 65.7 percent in 2017 to 62.6 percent in 2018. Agriculture contributes only 10 percent to GDP but accounts for 54 percent of employment. Working in agriculture is highly correlated with being poor: about 66 percent of poor household heads work in agriculture. Increases in agricultural exports and productivity helped reduce poverty in recent years. While the tourism sector has seen growth, other sectors are not performing up to expectations.

The phenomenon of climate change is another major challenge for Bhutan. It is anticipated that, due to climate change, Bhutan will witness frequent floods and landslides, changes in weather cycles, receding glaciers and other natural hazards.

Bhutan has harmonized its 12th Five Year Plan, the graduation plan from LDC status in 2023, with the Sustainable Development Goals (SDGs). Some of the measures under the eligibility criteria, particularly the Economic Vulnerability Index (EVI) are closely linked with the SDGs. Strong and sustained economic growth over the last decade has helped Bhutan to meet the graduation criteria of per capita GNI; it also formed the basis for improvements in livelihoods, socio-economic well-being, and progress towards many of the SDG targets.

While the unprecedented socio-economic impacts of the COVID-19 pandemic may dampen and/or exacerbate challenges to Bhutan’s sustainable transition, the Committee for Development Policy may take a holistic view in its meeting scheduled in February 2021 to review progress made by graduation-aspiring LDCs like Bhutan. Bhutan is anticipated to graduate from the LDC category by 2023.

Bhutan is a relatively capital-rich, labour-poor (by quantity not skills) country with a small domestic market. This places relative emphasis on capital-intensive, high-productivity, skills-rich export activities. Low-productivity, low-wage agricultural activities, particularly those serving the domestic market, have less potential. Particular opportunity exists in ICT-enabled services, not only as exports in themselves but as infrastructure and sources of linkages. The success of the Thimphu TechPark (a technology park and centre of excellence for information technology) so far illustrates this point. ICT-enabled services have the advantage of a potentially unlimited overseas market, often low start-up costs, rapid upskilling potential, compatibility with sustainable development and increasing importance in the more virtual, post-COVID world.

**Entry points**

The DTISU 2020 reflects efforts by the Royal Government of Bhutan to take stock of important developments in the country’s trade sector since the previous DTIS (DTIS 2012) and update Bhutan’s strategy and directions for trade integration into global and regional markets. As a consequence, the DTISU uses three main entry points in analysing the evolving economic and trade patterns:
Entry point #1: Focus on progress made on each cross-cutting issue and sector-specific strategy since 2012, using the DTIS 2012 roadmap baseline data and indicators and the 11th FYP impact assessment. The DTIS 2012 contained more than 250 actions spread over 6 areas, with a 5-year implementation span. While the initial momentum spurred by the DTIS launch in 2012 created an impetus for implementation, in the long run, the proposed actions got diluted or absorbed by other plans. No impact assessment had been conducted until the preparation of EIF Tier 2 proposals in 2016. Implementation performance was higher for the sector-specific chapters (export strategy, tourism, branding Bhutan) and the ICT sector, and less so for cross-cutting issues and implementation mechanisms. The DTISU also takes into account the recommendations to better align the roadmap with the 12th FYP and the flagship programmes. The DTISU closely aligns with the 21st Century Economic Roadmap currently being prepared by the GNHC, focusing on the next 10 years. Finally, and in line with entry point #4 below and the recommendations from the EIF ES, UNDP and DoT agreed on the need for a “light” update. As a consequence, the DTISU report does not have the depth found in the DTIS 2012, though maintaining a relatively similar table of contents.

Entry point #2: As Bhutan is set to graduate from the LDC category by the end of 2023, special emphasis is made in several chapters on the potential impact of LDC graduation on Bhutan’s relations with trade partners, and, subsequently on Generalized System of Preferences (GSP) and Overseas Development Assistance (ODA) medium-term patterns. While the decision on graduation from the LDC category combined with the devastating impact of the COVID-19 pandemic has triggered uncertainty and fear of the unknown in certain communities about the “middle-income trap” and “Dutch disease”, the DTISU tries to be as educational as possible on how to mitigate the possible short- to medium-term risks stemming from graduation. Additionally, the DTISU examines the concerns and challenges for Bhutan in meeting the economic vulnerability thresholds for successful transition. The long-term development goal of economic self-reliance serves as a beacon for Bhutan to ensure resilience and quality of growth; LDC graduation is not expected to bring major changes.

Entry point #3: The transition from aid for trade to investment for trade. On one hand, as Bhutan progresses towards LDC graduation and integration in the regional market deepens, the nature of ODA in general and Aid for Trade received by Bhutan is changing profoundly. On the other hand, with the entry into force of the 2019 Foreign Direct Investment (FDI) Policy, committed and confirmed FDI into Bhutan will increase in the near future. The nature of legal and regulatory reforms the RGoB is keen to progress is in part determined by the expected FDI projects that could fuel Bhutan’s future economic development. The DTISU 2020 and in particular the trade roadmap recognize and reflect this.

In line with the above, two equally important objectives are used as cross-cutting themes for the DTISU 2020 (1) increased competitiveness supporting LDC graduation and Vision 2030 and (2) harnessing new sources of growth to be found in the services and industry 4.0 revolution. In line with the above, the following theme was used for the formulation of the DTISU 2020:

“Improving trade in an inclusive and sustainable way to achieve economic self-reliance”

The DTISU 2020 contains nine chapters, divided into two pillars: Pillar 1 offers an overview of progress made on key cross-cutting issues affecting Bhutan’s trade development agenda since DTIS 2012 was launched, while Pillar 2 examines the different options before Bhutan to accelerate economic diversification, including through investment and export promotion, enhanced trade in services and digital transition.

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5 The WTO-led Aid-for-Trade initiative seeks to mobilize resources to address the trade-related constraints identified by developing and least-developed countries. In the context of the 2030 Agenda for Sustainable Development (the 2030 Agenda) and reflecting on the limitations of Aid for Trade, donors are increasingly replacing their focus from aid for trade to investment or trade.
CHAPTER 1: REVIEW OF TRADE PERFORMANCE, LDC GRADUATION AND WTO ACCESSION

In the last decade, Bhutan has become a lower-middle income country (LMIC). Its Gross National Income (GNI) per capita, at US$2850.03 in 2018, is now three times the threshold for lower middle-income countries. Since 2010, its GDP has grown an average of 6.15 percent per year, with a slight decline from 8.12 percent in 2016, for the period 2017–2018. The economic growth of Bhutan continues to be fuelled mainly by hydropower projects and the services sector, specifically tourism. The share of the manufacturing sector has remained stagnant in the last 10 years while the industrial sector was driven mainly by construction, mining and electricity. Due to constraints in production capacity and productivity in domestic markets, Bhutan’s economy has been dependent on high import volumes. And while merchandise goods exports have grown considerably over the years, this is outpaced by the rapid increase in import volume, thus leading to a widening balance of trade. Due to Bhutan’s high dependence on trade with India, the currency peg with Indian rupees contributed to further expansion of trade in and economic integration with India. Accession to the WTO means that the country has to give binding commitments in liberalization of goods and services and its adherence to many other agreements of the WTO. Irrespective of the suspension of talks in the WTO, Bhutan has moved ahead in its autonomous liberalization and harmonization of certain policies within the broader WTO framework. Bhutan missed an opportunity to accede to WTO as an LDC, which it may have done with lesser obligations. However, regardless of the level of bindings that Bhutan takes in the WTO, given that around 90 percent of its imports come from India at zero duties, these bindings will remain theoretical.

Bhutan aimed for the graduation process to be complete by 2023. This will coincide with the conclusion of the ongoing 12th National FYP, which envisages policy programmes to ensure a smooth transition from its LDC status. Further, graduation is anticipated to result in losses of technical and financial support, certain LDC-specific mechanisms, and changes in sources of external development assistance channelled or earmarked for social development spending. Less than 10 percent of Bhutan’s exports are to countries that grant Duty Free Quota Free (DFQF).

CHAPTER 2: SKILLS GAP, UPSKILLING, WOMEN AND YOUTH EMPLOYMENT

Bhutan’s current labour market conditions appear favourable compared to those in many other lower-middle-income countries. Yet, despite progress, Bhutan’s development continues to be hampered by critical skills shortages in a large number of areas. The barriers to private sector employment include (i) a high cost base, (ii) competition with the public sector, (iii) stringent labour market regulations constraining the availability of foreign labour, (iv) skills mismatches...
between employers and jobseekers, (v) limited growth opportunities for MSMEs, and (vi) a high level of informality. The composition of foreign workers reflects important indicators of skills shortages and gaps in the labour market. Foreign workers also occupy a broad range of other management roles including human resources (HR), finance, operations and housekeeping.

The difference in labour force participation rates between genders is significant but relatively small compared to the average for lower-middle-income countries. Currently, the female workforce faces limited access to skills training opportunities. They have a lower share of total employed persons compared to men. Close to 29 percent of workers are classified as informally employed, the majority of which are women in rural areas.

The skills gap and shortages negatively affect youth employment. With a lack of skilled employees, productivity can decline and lead to slower production times, and increased operation costs. Despite the shortage of a skilled workforce, Technical and Vocational Education Training (TVET) institutes still had difficulty recruiting students. This can be attributed to the mismatch between the training that existing institutes provide, and the skill sets required by firms.

Lack of funds makes it difficult for CSIs to train their staff. There is little collaboration between faculties and firms to ensure that the skills development courses help students develop the skills important to perform the functions of jobs available in the market. Investments in the diversification of the economy for exports and import substitution could stimulate the demand for more skilled workers that require within-firm skills upgrading and firm-specific skills. Recent experience with public-private partnerships (PPPs) can offer relevant lessons for stimulating private sector job growth. Improving the private sector’s access to labour, both unskilled and skilled, is paramount.

The COVID-19 pandemic has disrupted livelihoods for many young people. Education and training opportunities for youth have also been interrupted, creating long-term implications for post-COVID recovery. ICT is still at a nascent stage in Bhutan. As a result, youth are not conversant in new ICT knowledge in product design and innovation and are unable to fully exploit the growth potential of new technologies and explore job opportunities in ICT, driven by the growth of secondary and tertiary sectors. These remote opportunities are particularly beneficial for young women and other vulnerable youth who have been disproportionately affected by the crisis.

CHAPTER 3: TRADE FACILITATION, TRANSPORT AND LOGISTICS

As a landlocked Least Developed Country, Bhutan faces daunting challenges, as its costs associated to trade are further increased due to higher logistics and transportation costs related to transit entry and exit points, as well as the lack of trade facilitation measures and infrastructure support. Reducing trade costs is essential to effectively using trade as an engine of growth and sustainable development.

There seems to have been the most progress in border-related issues to support trade facilitation while there is significant room for improvement in terms of logistics. Bhutan still needs to increase its trade efficiency to enhance export competitiveness and market opportunities for SMEs. SMEs still face relatively high transaction costs, mainly due to excessive transport costs and dependency on transit for access to a seaport.

Bhutan’s cross-border trade is governed by a number of regulatory frameworks that lack the clarity and simplicity needed. Multiple agencies imposing various requirements that often overlap and multiagency controls at entry points combine to result in legal uncertainty. Customs procedures for the clearance of imported goods from third countries follow different
processes and steps than those from India. Bhutan also lacks a central information centre where traders can obtain the necessary support and information required for importing and exporting.

In 2013, Bhutan strengthened its trade facilitation efforts with the establishment of the National Trade Facilitation Committee (NTFC). Trade facilitation and digitalization have grown in importance, as evidenced by the WTO Trade Facilitation Agreement (TFA) and the growing number of regional and subregional initiatives aimed to facilitate electronic exchange of information along international supply chains.

Domestic logistics issues have also not been addressed as the professionalization of the local logistics industry seems to have failed to attract the attention of the RGoB. There is probably limited understanding related to the role of the local logistics industry in supporting Bhutan’s trade competitiveness. Logistical inefficiencies also stem from different border agency facilities in different parts of the border towns, including weighbridges, warehouses, clearing and forwarding agents, and temporary sheds, which have also contributed to increased traffic congestion.

The bilateral transit procedure with India that was developed in the early 1980s may need to be reviewed and updated to incorporate new developments, like the introduction of dry ports in Bhutan and the opportunities offered by digital technology in speeding up trade and transit processes.

CHAPTER 4: BUSINESS CLIMATE, CSI DEVELOPMENT AND ACCESS TO FINANCE

The business and investment climate in the country remains challenging. Although the government has put in place several business reforms from 2012 to 2020, businesses have not benefited from these reforms as much as might have been expected. Several demand- and supply-side factors have constrained private sector development. These include skills shortages, the small size of the domestic market along with limited access to foreign markets, and the lack of competition. Access to finance is also one of the repeated challenges voiced by the private sector.

Despite the emphasis on private sector development, a public sector–driven development mindset has persisted. This mindset has led to the formation of a large number of state-owned enterprises that have crowded out the private sector. Currently, there is no overarching policy to define the role of SOEs in private sector development. Also, the existing mechanism for public–private dialogue (through the Better Business Council) has not been effective in catalysing reforms.

Bhutan’s economy is dominated by micro, small and medium-sized enterprises (MSMEs). Keeping these smaller enterprises in business and facilitating their growth are critical to the long-term, sustainable development of the country. A risk for Bhutan, as with any developing country, is that the plethora of micro- to small businesses, particularly in rural areas, will remain disconnected from the wider domestic economy and in turn from global value chains. What is missing as well is maintaining focus on the sectors where most MSMEs in Bhutan can be found: trading (mostly importers) and services. To date, most of the focus has been on CSIs, agriculture and manufacturing.

Cottage and small industries account for more than 95 percent of the total number of industries in the country, playing a critical role in the industrialization and diversification of the economy as well as employment creation. The lack of formal registration of the majority of micro and small producers in the country has limited the ability of CSIs to take advantage of public programmes and initiatives. Part of the challenge is conceptual. Bhutan has an unusual way of
considering the small-sized business sector. The trading and services sectors are largely or entirely excluded from most policy plans as they are not captured by the CSI definition. CSIs continue to struggle to grow and expand, with limited overseas market penetration and limited ICT and e-commerce adoption. These challenges tend to increase their business costs, with limited to no opportunities to scale up their operations.

Bhutan’s financial sector has grown significantly since the first DTIS study in 2012 and has made substantial progress in terms of financial viability, profitability and competitiveness. Access to finance is improving due to more diverse collateralizable assets, the establishment of the Credit Information Bureau of Bhutan (CIB) and deliberate government action. Many SMEs in Bhutan still face difficulties in receiving payment facilities for their imports and exports. Efficient and affordable trade finance mechanisms are essential for Bhutan’s exporters. Bhutan should consider introducing additional trade finance solutions such as factoring, credit insurance and trade loans.

CHAPTER 5: QUALITY INFRASTRUCTURE

Standards and Quality Infrastructure (QI) have an important impact on Bhutan’s economic integration with the global economy. Standards, technical regulation and conformity assessment procedures, and metrology, including adhering to sanitary and phytosanitary (SPS) measures, can help facilitate Bhutan’s exports of commodities and light manufacturing products as well as cater to higher quality and sustainably produced products and services.

With LDC graduation in sight, the push to switch from quantity-to quality-focused production, together with a proposed emphasis on organic products and niche markets, all underscore the need for Bhutan to strengthen its institutional and regulatory frameworks for quality. At the same time, Bhutan aspires to protect domestic and international consumers and ensure their safety from counterfeit and unsafe products. As Bhutan’s sectors are increasingly adding value to their products by moving to semi-processed, semi-finished goods, an update of Quality Infrastructure is needed to fill the gaps identified and ensure adherence to international commitments and meeting buyers’ demands.

As Bhutan brands itself a country with organic products and occupying niche markets, the quality and safety of the products as well as the reliability and consistency of logistics systems must be efficiently developed and implemented. On the other side, as consumers relying heavily on imported products, long-term health issues due to unsafe food products cannot be equated in monetary terms.

Some of the salient features of issues related to sanitary and phytosanitary (SPS) measures and technical barriers to trade (TBT) faced by Bhutanese exporters are (i) the lack of supply-storage chain, cold storage and dryer facilities at the borders and across the country; (ii) the absence of mutual recognition agreements both at the bilateral and multilateral levels; and that (iii) all agro-based products and chemical-based products such as ferro-silicon, ferro-alloys, cement, steel, etc. require certifications of quality from accredited testing facilities, letters of origin and letters of credit for export to the region and third countries.

There are also persistent gaps in terms of legislation, institutional frameworks, and SPS-TBT related infrastructure between the current situation in Bhutan and international best practice. These include legislative frameworks with overlapping roles and responsibilities of different agencies; lack of SPS standards for many consumer items; lack of recognition of Bhutanese certification by importing countries; insufficient SPS-TBT-related infrastructure, including laboratories and equipment; lack of a web-based portal for information on SPS and TBT and limited technical capacity and human resources.
The Bhutan Standards Bureau (BSB) has identified eight priority areas for standardization. Technical committees have been established to carry out standardization work and a total of 10 technical committees in different areas have been established for this purpose. BSB’s National Metrology Laboratory has inadequate metrological equipment and lacks the qualified staff to cater to the needs of the service industry, both in terms of calibration services and compliance monitoring. Both BSB and the Bhutan Agricultural and Food Regulatory Authority (BAFRA) have limited areas of conformity assessment and need to strengthen testing facilities.

An efficient and effective Quality Infrastructure system is a critical element towards the achievement of the RGoB’s objectives for enhancing competitiveness, new market access, innovation, productivity and the protection of consumers’ health and safety. Continuous enhancement of QI systems and institutions are essential as a robust national QI system is vital for facilitating trade, gaining market access and meeting international trading requirements.

**Pillar 2: Diversification and new sources of growth**

Bhutan’s strong growth trajectory is expected to continue. Growth has been sustained thanks to the main drivers of growth that constitute the industry (hydropower, metals) and, to a lesser extent, the agricultural sector. The services sector’s share, which includes tourism, the highest foreign exchange earner, has remained steady. However, Bhutan’s trade has remained highly concentrated in a few products. New sources of growth must be found to tackle the increasing trade deficit. Export diversification must be prioritized: new export products, in particular niche products, must be developed and new markets—with or without trade preferences—must be tapped into. The quest for further productive capacity-building and diversification into sectors with higher productivity is of critical importance if Bhutan is to demonstrate that its graduation will be successful.

Diversification of trade also takes the form of import substitution. Part of the RGoB and Ministry of Economic focus is now shifting towards diversifying and broadening the economic base through enhancing domestic production and adding value to resources.

New sources of growth will also be rooted in Bhutan’s integration in regional trade, the need for more services-intensive and processed products and the adoption of ICT and digital economy innovations. As clearly reflected in the 12th FYP, the rise of the knowledge economy and the development of digital technologies including Internet penetration will create new needs and command new occupations, including in Bhutan.
CHAPTER 6: TRADE DIVERSIFICATION

The close relationship and liberal trade regime with India have helped facilitate the main driver of economic activity, the production and export of hydropower-produced electricity. In addition, economic growth continues to be driven by tourism, the commercialization of some rural agricultural activities and ferro-alloys, which, however, are in decline. An important issue is whether a strategy of export-oriented production based on particular niche products, perhaps branded, can form the basis of a viable development strategy, or whether complementary and alternative strategies need to be pursued.

The government’s development strategy focuses on hydropower; cottage, small and medium-sized industries; mining; tourism and hospitality; and agriculture development. However, it is important to further specify certain industries within this broad focus by identifying a shortlist of industries to target as pioneer firms that may experience increased costs due to changes in local factor endowments. The services sector continues to grow, including those delivered by companies at Thimphu TechPark, which forms a small but growing source of employment and economic activity near the capital.

Its dependency on India clearly exposes Bhutan to volatility and systemic risks. One of the main questions is the extent to which meaningful diversification away from the Indian market, by product and destination, is desirable and possible, given that little of such diversification has taken place in the eight years since the DTIS 2012. An alternative is that the existence of such a strong trading relationship should be acknowledged and maintained, with product diversification pursued as a priority over geographic diversification.

Bhutan’s efforts to diversify into potential priority exports may be limited by the possible increase in duties after its graduation. Yet, for current major products, diversifying into other markets is not likely to be affected by a possible loss of preferential tariffs. For the European Union (EU), tariff rates under the Generalized System of Preferences would still be zero for cardamom and cement products, for instance. For Hong Kong and Singapore, Most Favoured Nation (MFN) rates are zero for all the major export products of Bhutan. In the case of Thailand, the tariff rates are either not covered by the GSP for LDCs (cardamom and cement), or zero under the MFN regime (dolomite, gypsum, and silicon).

The main recommendations for import substitution by the RGoB include the promotion and support of commercial crop farming, adoption of the farm-to-table model, and enhancement of farm-industry linkages. The government is urged to consider feasibility studies, and to offer better business infrastructure, fiscal support and incentives. However, no consideration is given to comparative advantage, or Bhutan’s efficiency in making one of the recommended products relative to others, compared with the ability of other countries to produce that product relative to international costs. While import substitution industrialization will not be possible, there may be potential for import substitution in standard products already produced naturally in Bhutan, particularly in the agricultural sector, where value addition may be limited.

In attempting to achieve this transition, it is recommended that a ‘binding constraints’ approach be adopted rather than a horizontal approach under which all obstacles to trade diversification are addressed at once. While a horizontal approach may be too ambitious and can lead to failure and disappointment among policymakers, the idea of addressing binding constraints one by one involves tackling particular challenges such as finance, transport and labour productivity, so as to achieve relatively rapid, if limited, progress and subsequently learn lessons for the wider economy.
CHAPTER 7: BRAND BHUTAN, EXPORT AND INVESTMENT PROMOTION

The strong sense of national vision associated with Gross National Happiness has played a key role in the development of productive capacity and export development. Brand Bhutan, export and investment promotion can also benefit from a powerful national vision. The Bhutanese emphasis on GNH promotes a national vision around which people can agree, even if some may lose out in the short run. This strong process of state legitimation plays an important role in facilitating active measures to build exports and attract investment. It also makes Brand Bhutan authentic and integrated with an entrenched national vision, which in turn helps with implementation of investment policy.

Export diversification by product or destination is more likely if it is conducted by foreign investors, who have market knowledge, ready access to supply chains, and technology for production at scale. The increasing consensus among many contemporary development economists is that productive capacity precedes export growth. This means that during the full roll out of Brand Bhutan, the government and private sector must be completely clear on what products and services it is promoting, and that these products or services can be delivered in high-quality and in sufficient consistency and volume. There is an opportunity for Bhutan to brand several exciting new areas, particularly in the creative economy, as recognized by the work of the International Trade Centre (ITC) on the Creative Industries Export Strategy 2020–2025. Creative industries can not only play a part in investment and export diversification, but also play a role in rolling out Brand Bhutan.

The investment environment is one of the areas in which the most change has taken place since the DTIS 2012, with a range of restrictions removed, culminating in the 2019 investment policy which liberalized a number of areas, particularly in manufacturing, apart from the negative list, the list of industries and activities in the Foreign Direct Investment Policy 2019 in which FDI is not allowed. Yet, Bhutan has performed quite poorly in recent years. FDI inflows are now lower as a proportion of GDP than comparator countries such as Bangladesh, the Lao People’s Democratic Republic and Nepal, as well as the LDC average. The discrepancy between FDI figures from global and national sources needs to be rectified, as it makes it harder to track and put in place policies to promote and incentivize FDI, as well as extracting the main benefits from it.

Investment is prioritized in the (i) development of the green and sustainable economy; (ii) promotion of socially responsible and ecologically friendly industries; (iii) promotion of culturally and spiritually sensitive industries; (iv) promotion of Brand Bhutan; (v) creation of a knowledge society; and (vi) diversification of the economy for exports and import substitution. According to the Bhutan Investment Strategy, the critical challenges are considered to be: (i) a weak legal, regulatory and institutional framework; (ii) the absence of structured investor targeting, investment promotion, facilitation and aftercare; and (iii) a relatively young and narrow private sector. The Department of Industries faces a conflict of interest between promotion and regulation, finding it difficult to perform both functions at once. Ideally, these functions would be divided between different entities. A more optimal long-term solution would be to make broader institutional changes aimed at consolidating investment and export promotion, learning from best practice.

The recommendation to establish an Economic Development Board remains relevant since the original DTIS 2012 and could even be combined with a one-stop centre with the overarching responsibility for business, trade and investment policy, based on the Singapore model. In the nearer term, to complement the national investment strategy, investment promotion plans for a small number of specific sectors and products should be put in place, using modern techniques of investment promotion and targeting. Investment promotion should continue to be linked with an industrial park or zone. Measures should be enacted to incentivize investors.
to transfer knowledge, such as through joint venture schemes or minimum employment requirements. An industrial park or special economic zone (SEZ) can be used to target recommended sectors or subsectors in a specific geographical locale using appropriate incentives and policies.

CHAPTER 8: TOURISM SUPPORT SERVICES

The tourism sector in Bhutan has seen rapid changes since 2012. The high growth rate of regional tourists, coupled with long-existing bottlenecks, prompted efforts to restructure the sector in a responsible and sustainable manner. Bhutan's tourism industry contributes over 9 percent to GDP, earns the highest hard currency reserves, and provides the highest employment opportunity. In 2019, Bhutan earned US$88.63 million through the tourism tariff, as compared to US$47.68 million in 2011. Regional tourists comprise the majority of visitors, accounting for 77.12 percent of all tourists in 2019. Despite repeated pledges by successive governments to increase visits to the east of Bhutan, the benefits of tourism continue to be unevenly spread on a regional basis. Lastly, the seasonal nature of tourism has led to the inequitable distribution of visitors and contribution of tourism to regional and local developments, further adding to the burden on infrastructure during peak seasons.

Practically all tourists to Bhutan have undertaken some form of cultural sightseeing activity. Historically, around 90 percent of tariff-paying tourists are primarily cultural tourists and around 10 percent are trekking tourists. Product development has been largely concentrated on culture, nature, and trek-related activities, with recent attention towards diversification to wellness and adventure tourism.

Tourism does not have industry status in Bhutan and instead falls under the service industry. As a sector, however, it is made up of a diverse group of industries that supply goods and services, representing a complex value chain from direct vendors to intermediate suppliers. These interlinkages, both forward and backward, are present in various forms, from physical entities such as accommodations, restaurants, and attractions, to service providers such as tour operators, car rentals, guides, farmers and food processors, manufacturers, crafts persons, airlines, IT providers and distributors.

The regulatory frameworks relating to tourism are the Tourism Levy Act of Bhutan 2020, Tourism Rules and Regulations 2017, and the Economic Development Policy 2016. A Tourism Policy is currently under development. The Tourism Levy Act of Bhutan 2020, which was adopted in February and implemented in July 2020, provides a major shift in tourism policy by incorporating regional tourists in the tourism levy. While international tourists are charged the existing US$65 per night halt (overnight stay), regional tourists are charged BTN 1,200 per night halt. The effect of this policy change will be difficult to assess for some time due to the pandemic that has totally stopped the tourism sector from functioning. Another bottleneck in the carrying capacity is related to air transport. Bhutan has only one international airport in Paro and only two airlines with limited destinations in the region, making travelling to the country a challenge.

Institutional weaknesses and bureaucratic complexities have exposed a key issue in inter-agency coordination. Various stakeholders have pointed to a weak level of organization and coordination among government agencies in regulating and promoting the tourism sector.

A major challenge for the tourism sector is the shortage and quality of human resources. The reskilling and upskilling of professionals in the industry has not been a major priority area. Despite numerous investments by the government in improving ICT infrastructure and services, along with attempts at promoting ICT adoption for tourism stakeholders, the sector has not been able to effectively leverage these tools for internal streamlining and external marketing. As a service sector, service delivery is a critical component of the tourist experience. Training
programmes for soft and hard skills should be conducted regularly for all stakeholders, from
government officials to private sector practitioners, to improve professionalization, quality of
services, and cross-sector coordination. In addition, monitoring and evaluation of quality and
standards should be strongly implemented.

CHAPTER 9: DIGITALIZATION, E-COMMERCE AND INDUSTRY 4.0

In his address on 17 December 2019, on the occasion of the 112th National Day, His Majesty
the King Jigme Khesar Namgyel Wangchuck laid out one of the most forward-looking and
dynamic visions of Bhutan when emphasizing the need to create economic opportunities for
the next generation. His Majesty called for working collectively for a clear economic roadmap
for the 21st century. His Majesty noted that technological advances in artificial intelligence (AI),
robotics, automation, big data, blockchain, quantum computers and fintech—digital currencies,
digital wallets and digital banking—accelerate economic growth.

While COVID-19 has undoubtedly resulted in negative impacts across sectors, market
segments and businesses, it has also opened opportunities for Bhutan to accelerate its efforts
to address its development issues. One way this can be done is by dedicating resources in
establishing a digital economy ecosystem that promotes the integration of a variety of digital
solutions across the nation’s priority sectors. In addition to catalysing digitalization, Bhutan can
commence its transition to the Fourth Industrial Revolution (Industry 4.0), with the objective of
strengthening its manufacturing capacities as well as exploring e-commerce solutions and
expanding national and international trade capacity given the country’s landlocked nature.

The RGoB aspires to create an ICT-enabled knowledge society and acknowledges that a
strong digital infrastructure that provides access to affordable and reliable high-speed Internet
is fundamental to this vision. Such an approach can promote digital inclusion; help close gaps
between socio-demographic groups; and open economic opportunities. Bhutan recognizes
that the development and growth of e-commerce and e-services are synergistic with the
development and improvement of ICT facilities and technology.

Domestic demand for ICT services remains weak; this is largely due to a high reliance on
public sector ICT projects. There is a strong necessity to promote the use of IT services across
sectors as much as possible through the development of relevant policies.

Bhutan is still at the infancy stages of transitioning to the Fourth Industrial Revolution. Hence,
the challenges the country faces to transition to this model are very similar to those found in
other developing countries. A major challenge that is hampering Bhutan’s progress to Industry
4.0 is the lack of access to reliable Internet infrastructure and/or connectivity. The cost of
accessing Internet services is extremely high compared to its regional neighbours. Bhutan
has recognized the need to introduce digital/ICT skills development as early as possible
among students. However, the shortage of qualified ICT teachers, lack of access to essential
technologies and unavailability of online courses are some of the key challenges that primary
and secondary institutions encounter when trying to increase the digital skills of the next
generation.

From a policy perspective, Bhutan has developed several strategies and visions to establish
a framework to develop an independent and sustainable e-commerce ecosystem. In Bhutan’s
11th and 12th Five Year Plans, ICTs have been clearly recognized as a strong enabler to contribute
to Bhutan’s economic development. Most recently, the RGoB has launched the flagship
“Digital Drukyul” initiative to support the establishment of e-government services (Royal
Government of Bhutan 2020). In 2019, the Government prepared E-commerce Guidelines,
which outline comprehensive legal obligations on many facets of e-commerce. Bhutan has started to establish a gig economy in efforts to promote and catalyse the adoption of digital technologies among Bhutanese. To support the establishment of new start-ups in the country, a group has started “iHub Bhutan”, a platform which offers services such as pre-incubation programmes, co-working spaces, research and consultancies for budding entrepreneurs.

While Bhutan has reflected the importance of ICTs and e-commerce in its latest strategic policies and vision, there is no dedicated e-commerce strategy outlining the concrete steps to be taken to establish this ecosystem. Access to finance for MSMEs represents a challenge for them to participate in digital and e-commerce platforms. Banks in Bhutan have a risk-averse approach and therefore do not offer credit only, unless valid collateral such as land and buildings are available.

**Review of DTIS 2012 performance, the Action Matrix, resource mobilization and the M&E framework**

The completion of the DTIS 2012 was a landmark for the trade sector in Bhutan as the Department of Trade had, for the first time, come up with a comprehensive framework for trade promotion and development. The time was also propitious in the sense that the 11th FYP (2013–2018) was due to commence the following year, wherein both the MoEA and DoT would identify projects for implementation during the period. The DTIS 2012 also reflected a conscious effort towards mainstreaming trade in the development agenda that was long overdue.

It is difficult to assess the success of the DTIS 2012 properly as no holistic review of the recommendations listed in the Action Matrix (AM) has been undertaken. There were 23 measures considered very high priority, 103 high priority, 64 medium priority and 11 low priority measures. Success of the implementation of the DTIS 2012 AM is rated at 40 percent. The major factor that hindered the successful implementation of the DTIS 2012 AM is the lack of a coordinated effort to mainstream trade in the 11th FYP development programme. In as much as the DTIS 2012 was a multisectoral approach to integrate trade in the development agenda, most recommendations were not incorporated in the 11th FYP as the projects indicated in the FYP were identified and developed by individual agencies with their respective sectoral interests. In other words, many activities proposed under the DTIS 2012 AM did not find place in the FYP. Other factors that hampered implementation were (1) too many activities proposed for implementation, (2) the absence of a clear monitoring and follow-up mechanism, (3) inadequate intra- and inter-agency coordination, (4) weak institutional capacity including change of personnel in the National Implementation Unit (NIU), (5) shifting development priorities and (6) a lack of financial and human resources.

Each of the nine chapters in the DTISU 2020 includes recommendations and projects that can be implemented in the short-term (i.e. within the 12th FYP period), others that can start within the 12th FYP but can extend beyond the scope of the plan, and then others that can be pursued later. The last two have been grouped together as those to be implemented in the medium- to long-term period, i.e. between 2024 and 2030. There are a total of 98 projects, of which 60 may be implemented in the short-term and 38 initiatives in the medium- to long-term. The large majority, 61 percent, of the projects are planned for implementation for the period 2021–2023, while the rest, 39 percent, are to be taken up in subsequent years. Availability of funds, the RGoB’s priorities and the internal capacity for implementation will determine the commencement of the projects regardless of the set time frame.
The 12th FYP notes Bhutan’s impending graduation from the LDCs in 2023, with a three-year transition period until the end of 2026. The document does not expressly discuss the future implications of graduation on financial resources. There is an implicit acknowledgement that support from development partners is essential not only for the success of the 12th FYP but also to lay down a strong foundation for sustainable development in the future as Bhutan becomes a high-income country.

The DTISU 2020 relates to the ongoing review of the 12th FYP by the Gross National Happiness Commission and the work of the Task Force on the 21st Century Economic Roadmap. GNHC sources show that in principle, the 12th FYP will remain, but implementation will depend on the availability of resources, specifically on domestic resources, implying that some targets will not be met due to the effects of the COVID-19 pandemic. The best course would be to convene all stakeholders to explore how the recommendations under the DTISU 2020 could be financed as soon as the study is approved. Leadership and initiative on this matter rests with the MoEA and with the National Implementation Unit (NIU) for implementation and monitoring of the DTISU 2020 in cooperation with UNDP, GNHC and the Ministry of Finance. If the next round table meeting can be held within the first half of 2021, it will offer an ideal opportunity for resource mobilization.

Reviews of previous FYPs note that except in cases of donor-funded projects and programmes, the concept of evaluation is not firmly rooted in the national development system, neither at the central nor local levels. Therefore, monitoring and evaluation (M&E) of programmes and projects needs to be strengthened at all levels of the RGoB. The shortfall in M&E is being addressed to some extent from the GNHC Secretariat perspective, but such a realization has not necessarily dawned upon line ministries and organizations. This issue requires concerted efforts from the GNHC Secretariat in ensuring that periodic M&E is conducted as an integral part of the implementation of development programmes and projects.

The responsibility for implementation and monitoring, however, rests partly with the 14-member National Steering Committee (NSC) chaired by the Secretary, MoEA and comprised of representatives from other relevant organizations. The responsibilities for implementation of the DTIS 2012 was spread across a number of organizations. This required a strong coordination role within the MoEA, and the NSC was expected to play that role to a large extent. But for some reason, NSC confined its work to the issues under the EIF with the rest being left to the individual organizations concerned. DTIS 2012 lacked proper ownership and responsibility of coordination for systematic implementation and follow-up. This must be avoided for the DTISU 2020. As the lead agency for the 12th FYP’s National Key Results Areas (NKRA) 2 on economic diversification, the MoEA should drive the programme. To that end, the NSC should be provided with this central role in addition to responsibilities in programme coordination, implementation, monitoring and evaluation.
CHAPTER 1

REVIEW OF TRADE PERFORMANCE, LDC GRADUATION AND WTO ACCESSION\textsuperscript{6}
1.1 Introduction

Bhutan has a unique stance: non-economic aspects of well-being are given equal weight as their economic counterparts in the pursuit of sustainable and holistic development. So, Bhutan has placed greater importance on Gross National Happiness (GNH) relative to its Gross Domestic Product (GDP), a concept developed by His Majesty King Jigme Singye Wangchuck, the Fourth King in 1972. GNH is based on four key pillars: (i) sustainable and equitable socio-economic development, (ii) preservation and promotion of culture, (iii) conservation and preservation of the environment, and (iv) promotion of good governance. Bhutan consistently pursues policies that place its people at the centre of development.7

Bhutan follows a five-year planning cycle that articulates the socio-economic development priorities and programmes for the period. In the initial years of planning, the focus was on building infrastructure. The country’s Human Development Index (HDI) value for 2018 was 0.617, which places the country in the medium human development category, positioning it at 134 out of 189 countries and territories.8 And, although Bhutan’s ranking on the 2017–2018 Global Competitive Index was 82, it ranked 32 in terms of institutions, ahead of India (39), Bangladesh (107), China (41), and the Republic of Korea (58). Bhutan has been successful in addressing the poverty challenge. In 2019, the proportion of the segment of the employed population below US$1.90 purchasing power parity a day is low at 1.3 percent.9

In his address on 17 December 2019, on the occasion of the 112th National Day, His Majesty The King Jigme Khesar Namgyel Wangchuck laid out one of the most forward-looking and dynamic visions of Bhutan when he emphasized the need to create economic opportunities for the next generation. His Majesty called for working collectively for a clear economic roadmap for the 21st century. The roadmap is envisaged to help every individual and entity to understand their respective roles and work towards a common national objective. His Majesty noted that technological advances in artificial intelligence (AI), robotics, automation, big data, blockchain, quantum computers and fintech—digital currencies, digital wallets and digital banking—accelerate economic growth.

A High-Level Committee has been instituted to provide overall strategic direction to the formulation of the economic roadmap, build consensus and foster national ownership among the heads of government agencies, political parties, institutions, the private sector and experts from various fields.

Structure of the economy

In the last decade, with poverty incidence reduced by two thirds, Bhutan has become a lower-middle income country. Its Gross National Income (GNI) per capita, at US$2850 in 2018, is now three times the threshold for lower middle-income countries and only 10 percent below the threshold for upper-middle income countries.10 Bhutan also maintains solid growth and macroeconomic stability. Since 2010, GDP has grown an average of 6.15 percent per year, with a slight decline from 8.12 percent in 2016, for the period 2017–2018. Despite this, with an average growth rate of over 6 percent for the period 2010–2018, Bhutan remains one of the

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6 This chapter benefited from extensive comments received from Mr Nagesh Kumar, Mr Hamza Malik, Ms Mia Mikic, Mr Oliver Paddison and Mr Yann Duval, UNESCAP.
fastest growing economies in South Asia. The economic growth of Bhutan is fuelled mainly by hydropower projects and the services sector, specifically tourism, and supported by sound fiscal and monetary policies (see Table 1.1).

Figure 1.1: Bhutan development indicators, 2005–2018

The GDP of Bhutan is largely driven by the industrial and service sectors, which account for 82 percent of the total GDP. The share of the manufacturing sector has remained stagnant in the last 25 years while the industrial sector was driven mainly by construction, mining and electricity (Figure 1.2 and Figure 1.3). In contrast, the agricultural sector accounts for 58 percent of the total workforce and 16.8 percent of GDP. For the period 2010–2018, agriculture recorded an average annual growth of 2.86 percent and manufacturing grew at an average of 6.2 percent. Despite a sharp drop of 5.25 percent in 2013, the sector bounced back, with a growth rate of 9.15 percent in 2014. Services grew at an average of 8.32 percent despite poor growth performance for the period 2012–2013. The overall shares of each sector have not changed considerably in the past eight years. The shares of services and agriculture in the GDP have increased marginally by 1 and 2 percentage points respectively, while the share of manufacturing has fallen by 3 percentage points.

Note: Trade as percentage of GDP is at the secondary axis.
Source: ESCAP, compiled from World Development Indicators (see databank.worldbank.org/source/world-development-indicators).

Figure 11 above shows that with an average of 99.45 percent for the period 2010–2018, trade as a percentage of GDP is high and significant. Growth of trade remains stable, despite the slight decline from 102.19 percent in 2015 to 85.4 percent in 2016. Single-digit inflation, a stable exchange rate, and accumulating international reserves account for this stability. During the same period, inflation grew at an average of 5.68 percent per year.

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1 Lhaden, Tenzin (2018). End Poverty in South Asia. An update on Bhutan’s economy. World Bank Blogs. 13 November 2018. Available at https://blogs.worldbank.org/endpovertyinsouthasia/update-bhutan-s-economy#text=Bhutan%20is%20one%20of%20the%20fastest%20growing%20economies%20in%20South%20Asia.%20The%20economic%20growth%20of%20Bhutan%20is%20fuelled%20mainly%20by%20hydropower%20projects%20and%20the%20services%20sector%2C%20specifically%20tourism%2C%20and%20supported%20by%20sound%20fiscal%20and%20monetary%20policies%20(see%20Table%201.1)%20and%20has%20been%20accelerating%20with%20a%20growth%20rate%20of%203.2%20percent.%20The%20current%20national%20literacy%20rate%20is%2093%20percent.

The high share of employment in agriculture (58 percent) relative to its contribution to GDP (16 percent) is indicative of the low labour productivity in the sector. Measured by value added per worker, agricultural labour productivity has remained almost stagnant in the last 8 years while both the industry and services sectors have experienced steady growth in productivity since 2014. While labour productivity is highest in industries, the sector’s productivity growth has shown a decline from 2017. This may be explained by the shift of labour from a high productivity segment of industry labour (skilled and technical workers) to the services sector. However, due to low productivity, incomes are not expected to significantly improve, and poverty eradication will remain a challenge.
Table 1.1: Bhutan development indicators, 2005–2018

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing, value added (% of GDP)</td>
<td>13.96</td>
<td>15.89</td>
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<tr>
<td>Bank liquid reserves to bank assets ratio (%)</td>
<td>24.23</td>
<td>18.82</td>
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<td>Bank nonperforming loans to total gross loans (%)</td>
<td>5.44</td>
<td>7.03</td>
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<tr>
<td>Charges for the use of intellectual property, payments (BoP, current USD)</td>
<td>65332.23</td>
<td>304211.00</td>
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<tr>
<td>Charges for the use of intellectual property, receipts (BoP, current USD)</td>
<td>14886.99</td>
<td>11086.66</td>
</tr>
<tr>
<td>Current account balance (% of GDP)</td>
<td>-2117</td>
<td>-20.34</td>
</tr>
<tr>
<td>Expense (% of GDP)</td>
<td>20.92</td>
<td>20.42</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP)</td>
<td>39.65</td>
<td>30.82</td>
</tr>
<tr>
<td>External balance on goods and services (% of GDP)</td>
<td>-24.89</td>
<td>-25.07</td>
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<tr>
<td>Fixed broadband subscriptions</td>
<td>16766</td>
<td>10802</td>
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<tr>
<td>Fixed telephone subscriptions</td>
<td>27005</td>
<td>22015</td>
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<tr>
<td>Fixed telephone subscriptions (per 100 people)</td>
<td>3.85</td>
<td>2.92</td>
</tr>
<tr>
<td>Foreign direct investment, net inflows (% of GDP)</td>
<td>1.37</td>
<td>0.11</td>
</tr>
<tr>
<td>GDP (current billion USD)</td>
<td>1.78</td>
<td>2.45</td>
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<tr>
<td>GDP growth (annual %)</td>
<td>5.12</td>
<td>3.03</td>
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<td>GDP per capita, PPP (current international USD)</td>
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<td>11613.16</td>
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<tr>
<td>GNI (constant 2010 billion USD)</td>
<td>1.62</td>
<td>2.15</td>
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<td>GNI growth (annual %)</td>
<td>3.38</td>
<td>2.70</td>
</tr>
<tr>
<td>GNI per capita (constant 2010 USD)</td>
<td>2305.73</td>
<td>2850.03</td>
</tr>
<tr>
<td>Gross national expenditure (% of GDP)</td>
<td>124.89</td>
<td>125.07</td>
</tr>
<tr>
<td>Gross savings (% of GDP)</td>
<td>48.74</td>
<td>21.60</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP)</td>
<td>64.54</td>
<td>55.89</td>
</tr>
<tr>
<td>Industry (including construction), value added (% of GDP)</td>
<td>42.61</td>
<td>38.30</td>
</tr>
<tr>
<td>Inflation, consumer prices (annual %)</td>
<td>10.92</td>
<td>2.72</td>
</tr>
<tr>
<td>International tourism, receipts (% of total exports)</td>
<td>12.76</td>
<td>15.54</td>
</tr>
<tr>
<td>International tourism, receipts (current USD million)</td>
<td>93</td>
<td>121</td>
</tr>
<tr>
<td>International tourism, receipts for travel items (current USD million)</td>
<td>61</td>
<td>103</td>
</tr>
<tr>
<td>Manufacturing, value added (% of GDP)</td>
<td>9.06</td>
<td>7.53</td>
</tr>
<tr>
<td>Merchandise trade (% of GDP)</td>
<td>85.67</td>
<td>67.60</td>
</tr>
<tr>
<td>Net ODA received per capita (current USD)</td>
<td>230.41</td>
<td>13318</td>
</tr>
<tr>
<td>Personal remittances, received (% of GDP)</td>
<td>1.02</td>
<td>2.38</td>
</tr>
<tr>
<td>Personal remittances, received (current USD million)</td>
<td>18.14</td>
<td>58.15</td>
</tr>
<tr>
<td>Rural population (% of total population)</td>
<td>63.63</td>
<td>59.11</td>
</tr>
<tr>
<td>Start-up procedures to register a business (number)</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Tax revenue (% of GDP)</td>
<td>15.05</td>
<td>16.02</td>
</tr>
<tr>
<td>Time required to start a business (days)</td>
<td>35</td>
<td>12</td>
</tr>
<tr>
<td>Total reserves (% of total external debt)</td>
<td>65.86</td>
<td>38.73</td>
</tr>
<tr>
<td>Total reserves (includes gold, current USD million)</td>
<td>954.68</td>
<td>987.25</td>
</tr>
<tr>
<td>Trade (% of GDP)</td>
<td>104.19</td>
<td>86.71</td>
</tr>
<tr>
<td>Trade in services (% of GDP)</td>
<td>16.71</td>
<td>17.28</td>
</tr>
<tr>
<td>Vulnerable employment, female (% of female employment) (modelled ILO estimate)</td>
<td>85.48</td>
<td>84.15</td>
</tr>
<tr>
<td>Vulnerable employment, male (% of male employment) (modelled ILO estimate)</td>
<td>58.62</td>
<td>63.43</td>
</tr>
</tbody>
</table>

Note: The data of WB have variations from the data published by RMA, Bhutan. This could be due to the periodicity of data and the availability at a given time.

Source: ESCAP, compiled from World Development Indicators, World Bank.
1.1.1 Progress made since DTIS 2012

Since the last Diagnostic Trade Integration Study (DTIS) in 2012, Bhutan has progressed well on many fronts. A combination of prudent fiscal and monetary policies, as well as robust investments in hydropower, has largely facilitated its growth over the past years. Improvements in human development have also been significant, with five of eight Millennium Development Goals (MDGs) achieved and/or surpassed.

Guided by the development paradigm of Gross National Happiness, Bhutan is committed to realizing the 2030 Agenda for Sustainable Development and its Sustainable Development Goals and intends to graduate from its Least Developed Country status by 2023 with its 12th Five Year Plan outlining major directions and priorities. In line with its commitment to the implementation of the SDGs, Bhutan participated in the Voluntary National Review (VNR) and presented the results at the 2018 High-Level Political Forum for Sustainable Development.

The 12th FYP 2018–2023 is the country’s first policy framework towards implementing the SDGs. It also serves as “the last mile plan” and transition platform to ensure smooth and sustainable graduation from LDC status. The 12th FYP further facilitates and better integrates GNH and the SDGs by addressing and mainstreaming cross-cutting issues related to climate-induced natural disasters, gender equality, and women’s empowerment. Highlights of these achievements as well as the remaining gaps are detailed below:

- The poverty headcount ratio at US$1.90 a day (as a percentage of the population living on less than US$1.90 a day at 2011 international prices) declined from 2.2 percent in 2010 to 1.5 percent in 2018.
- The GNI per capita (constant 2010 USD) of US$2305.73 in 2010 increased to US$2850.03 in 2018.
- While the GDP (current USD) increased from US$1.55 billion in 2010 to US$2.45 billion in 2018; the annual GDP growth declined from 11.9 percent in 2010 to 3 percent in 2018.
- The share of exports and imports of goods and services (percent of GDP) decreased from 43 percent in 2010 to 31 percent in 2018 and 72 percent in 2010 to 56 percent in 2018, respectively, which could be due to FDI inflows into hydroelectric power plants and government’s spending on health and education.
- Life expectancy has increased from 68 (2010) to 74 (2018) years.
- The economic health of a country is measured not only in macroeconomic terms but also by other factors that shape daily economic activity such as laws, regulations and institutional arrangements. In terms of ease of doing business, the number of days needed to start a business declined from 46 days in 2010 to 12 days in 2018.
- The Istanbul Programme of Action (IPoA, paragraph 65.a) and SDG 17.11 aimed to double LDCs’ exports as a share of global exports by 2020. For the period 2010–2018, Bhutan’s share of exports in goods and services declined by 15 percent. This indicates significant challenges faced by LDCs like Bhutan to achieve this goal.

13 In 2010, Bhutan’s share in the world was 0.0035 percent and instead of becoming 0.0070 percent by 2020, it remained at 0.0030 percent in 2018.
1.2 Trade

Trade accounts for a significant share of Bhutan’s GDP (Figure 1.1). However, Figure 1.4 below shows the trade deficit (negative balance of trade) on merchandise goods to be increasing since 2014. Due to constraints in production capacity and productivity in domestic markets, Bhutan’s economy has been dependent on high import volumes. And while merchandise goods exports have grown considerably over the years, this is outpaced by the rapid increase in import volume, thus leading to a widening balance of trade. In contrast, the negative balance of trade in commercial services has demonstrated slight improvements in the last few years.

The 2019 provisional trade statistics indicates that Bhutan’s trade deficit improved by -32.42 percent in 2019. The trade balance in current prices was recorded at a deficit of BTN 29.124 billion in 2019, which accounted for 16.34 percent of the GDP. In 2018, the trade deficit had increased by 13.03 percent. The growth in exports is attributed to an increase in export of boulders and electricity. The economy also recorded a decrease in imports. The economy noted accelerated export growth of 14.39 percent from 4.58 percent growth in the previous year. The export of goods accounted for 79.4 percent of the total exports. On the other hand, export of services accounted for 20.59 percent of the exports. The exports recorded an accelerated growth of 19.12 percent compared to the growth of 7.65 percent in 2018.

The total value of export of goods and services in current prices was valued at BTN 60.602 billion in 2019, which accounted for 34.01 percent of the GDP, up by 319 percentage points. The total value of imports in current prices was recorded at BTN 89.726 billion compared with BTN 93.521 billion in the previous year. The total import value accounted for 50.35 percent of the GDP. Within imports, goods accounted for 81.66 percent and services 18.34 percent. However, the import of goods and services dropped by 6.6 percent as compared to accelerated growth of 8.21 percent in the previous year. As a result, the import growth declined by 14.8 percentage points from the previous year. The import of goods observed a drop by 4.99 percent and services by 13.19 percent compared to 2018.

The trade deficit is expected to decrease in 2020 as well. As per provisional figures with the Ministry of Finance, Bhutan’s trade deficit declined by 32 percent in the first half of 2020 compared to figures for the same period of last year. In absolute figures, the trade deficit decreased to BTN 12.84 billion from BTN 19 billion in the same period last year. Imports decreased to BTN 30.84 billion in the first half of this year from BTN 32 billion for the same period of last year. Exports on the other hand increased to BTN 18 billion in the first half of this year from BTN 13 billion for the same period last year. The increase was driven mainly by the increase in the export of electricity to India due to the commissioning of the Mangdechhu hydroelectric project in June 2019.
In 2019, Bhutan’s overall exports (including electricity) totalled BTN 41.83 billion, while its total imports were worth BTN 69.11 billion, leaving a negative balance of trade of BTN 27.28 billion.

Total exports of electricity for the same year were equivalent to BTN 10.58 billion. Between 2010 to 2018, Bhutan’s top 10 export commodities, excluding electricity, have been more or less the same, with ferro-silicon, cement and minerals as the top three commodities.

Since 2010, India and Bangladesh have consistently been the top markets for Bhutanese exports, with the former making up the lions share and the latter, a distant second. In 2017, respective export market shares of the two countries changed significantly—from 80 percent and 4 percent to 70 percent and 20 percent in 2018. This indicates market growth in Bangladesh. The decline in India’s market shares is attributed to the implementation of the Goods and Services Tax (GST), which increased the prices of Bhutanese imports in the country. This eliminated the price competitiveness that Bhutan previously enjoyed in Indian markets due to interstate taxes.

Despite the decline in export market shares, India remains Bhutan’s largest market (75 percent of global exports, excluding electricity in 2019). Bangladesh is also one of a few countries with which Bhutan has a positive balance of trade (Figure 1.5).

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1.2.1 Trade in goods

In 2019, Bhutan’s overall exports (including electricity) totalled BTN 41.83 billion, while its total imports were worth BTN 69.11 billion, leaving a negative balance of trade of BTN 27.28 billion. Total exports of electricity for the same year were equivalent to BTN 10.58 billion. Between 2010 to 2018, Bhutan’s top 10 export commodities, excluding electricity, have been more or less the same, with ferro-silicon, cement and minerals as the top three commodities.

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14 Overall, trade in goods includes electricity, but for the rest of analysis in this section, electricity exports to India are excluded.
Bhutan’s exports to Nepal have also considerably increased—from BTN 39.67 million in 2010 to BTN 427.83 million in 2019. Bangladesh, Bhutan, India and Nepal are members of the South Asia Free Trade Agreement (SAFTA). Bhutan has a free trade agreement (FTA) with India and a preferential trade agreement (PTA) with Bangladesh. Under these agreements, the possibility of Bhutan exchanging exports between and among these countries is considerable. Bhutan’s exports to its other major markets can be attributed to certain preferences it enjoys as an LDC, under the Generalized System of Preferences (GSP) or the Duty-Free Quota-Free (DFQF) schemes.

1.2.1.1 Trade with India

The Agreement on Trade, Commerce and Transit between India and Bhutan, first signed on 17 January 1972, governs bilateral trade between the two countries. Since then, the Agreement has been renewed and updated five times. The latest version of the agreement, signed on 12 November 2016, provides for free trade between India and Bhutan for all products, with no exceptions, to boost bilateral trade to mutually benefit both countries.

Under the current agreement, all goods produced in Bhutan or India are allowed to be imported duty-free by the other Party. This favourable trade agreement, its status as a landlocked LDC and its proximity to India account for Bhutan’s significant trade share with its neighbour. While overall trade with India has been increasing steadily, the trade deficit has considerably widened as well. This is a result of relatively stagnant exports to India while imports from India have been comparatively higher.
As an important market for Bhutan, efforts should be made to further increase exports to India. Using World Integrated Trade Solutions (WITS) data at the World Customs Organization’s six-digit Harmonized System (HS) level, a unit value calculation method was employed to identify products with export potential. The unit value of a set of homogeneous products is the total value of the imports (in cost, insurance and freight) divided by the sum of the quantities. It is a quantity-weighted average of the different prices at which the product is imported. Unit values may change over time due to changes in quality or in the mix of products sold at different prices, even if prices remain constant. Using this methodology, 205 items were identified to have export potential. This covers a market potential of 60 times more than Bhutan’s current total exports to India. Calculations and a list of items are detailed in the Annex 1 of this chapter.

As shown in recent analysis by the UN Committee for Development Policy (CDP), hydropower investments have required very large imports from India and thus a high demand for Indian rupees. Export revenues also require major rupee inflows. As a result, the current account is much more volatile than the capital account, which features high and steady inflows of development assistance, particularly from India. To maintain the peg during the major rupee shortage in 2011–2012, the Central Bank was obliged to liquidate reserves, engage in short-term commercial borrowing and to impose extra capital controls. Bhutan has little choice but to maintain its rupee peg, given the overwhelming dominance of trade with the country, close ties and the potential risks associated with any other currency arrangement, which would expose a small country with limited (if increasing) reserves to potential negative speculation.

The widening of the current account deficit in recent years, as shown in Figure 1.6 above, has been funded by loans and higher capital transfers (both hydropower related) rather than by reserve depletion. Countries like Bhutan with non-synchronized import and export flows, particularly if the swings are somewhat predictable, tend to maintain high levels of international reserves. Bhutan had ample reserves during 2011–2012, at more than nine months of imports. The problem was that under 4 percent were denominated in rupees, the currency (which is not fully convertible) needed for most transactions. After the crisis, not only did overall reserves increase, standing at US$1.3 billion in 2020 (17 months’ worth of imports), but the share of rupees in reserves rose to 26 percent in 2020. Despite the increase in the ratio, the composition of reserves is still an important indicator as long as the close relationship with

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16 **UN Committee for Development Policy (CDP).** “Lessons Learned in Developing Productive Capacity: Fourteen Case Studies”.

**Figure 1.6: Trade with India (excluding electricity) (value in BTN million)**

Source: ESCAP, compiled from Bhutan Trade Statistics, Ministry of Finance.
India continues. The volume of international reserves is not the only important measurement; composition also matters.

The experience shows the potential benefits of a stabilization fund that could serve as an effective ex ante sterilization mechanism of time-varying natural resource–related flows. Such a fund could receive rupee inflows of the Government of Bhutan and pay for necessary imports and interest on hydropower loans, without channelling these flows through the domestic banking system. Such a mechanism would also stabilize the credit and money supply. Any reduction in seigniorage as a source of government revenue would be small in comparison.

Box 1.1: Exchange rate policy

Developing countries typically follow a currency peg policy, in which a fixed exchange rate is set for the national currency vis-a-vis a foreign currency or basket of currencies. A realistic currency peg can reduce uncertainty, promote trade and boost incomes. Since the introduction of Bhutan’s ngultrum in 1974, the ngultrum has been pegged at par with the Indian rupee.

Maintenance of a fixed exchange rate has been beneficial for Bhutan. The peg arrangement not only contributed to low volatility in the bilateral real exchange rate with India, but it also helped promote confidence in the local currency. This served as a nominal anchor for monetary policy to manage domestic inflation and supported the process of monetization and economic development in the country. The fixed exchange rate targeting, however, limits the independence and flexibility of the Royal Monetary Authority (RMA) of Bhutan’s monetary policy, to effectively respond to adverse external shocks. For instance, price movements in Bhutan to a large extent, are exogenously determined by the price development in India. Thus, the movement in Real Effective Exchange Rate (REER) in Bhutan is strongly correlated with the Indian rupee exchange rate and its price movements.

As of December 2018, the Indian rupee depreciated by 9.2 percent against the US dollar. As a result, the REER and Nominal Effective Exchange Rate in Bhutan also depreciated by 2.7 percent and 1.1 percent, respectively. In nominal terms, the exchange rate depreciation of the ngultrum affected external debt, resulting in an increase of both the stock of debt and debt servicing.

It is estimated that the domestic economy will continue to remain vulnerable to exchange rate volatilities over the medium term. To maintain exchange rate stability, the RMA needs to ensure availability of adequate Indian rupees at all times, with the provision of 100 percent reserve backing for all Bhutanese ngultrum issued in the country. Effective and efficient management of international reserves and foreign exchange flows will continue to remain a vital strategic priority of the RMA over the medium term.

Due to Bhutan’s high dependence on trade with India, the currency peg with Indian rupees contributed to further expansion of trade and economic integration with India. Further, it allowed for low inflation rates to be maintained and pressure on its balance of payments to be reduced. As a conclusion, given Bhutan’s overdependence on India in trade, it is advisable to continue with this current practice. As its trade with other countries increase, pegging to a basket of currencies will be advisable.

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17 Rashid, H. "Understanding the Causes of the Rupee Shortfall: A Macroeconomic Policy Challenge for Bhutan and the Way Forward".
1.2.1.2 Trade with Bangladesh

Similarly, Bangladesh’s proximity with Bhutan helped facilitate trade between the two countries. Bangladesh is considered as a source of imports for bilateral trade. Among Bhutan’s top export items to Bangladesh include boulders, pebbles, gravel, broken or crushed stone, nutmeg, fresh or dried oranges, limestone and other calcareous stones, and dolomite. It is noted that it is only in recent years that Bangladesh has emerged as one of Bhutan’s top trading partners.

Figure 1.7: Trade with Bangladesh (value in BTN million)

![Graph showing trade with Bangladesh from 2006 to 2019 with bars for imports and exports and a line for balance of trade.]

Source: ESCAP, compiled from Bhutan Trade Statistics, Ministry of Finance.

As illustrated in Figure 1.7 above, Bhutan’s favourable balance of trade with Bangladesh has remained positive and increased until 2018. Trade balance increased in Bhutan’s favour starting in 2015 as exports to Bangladesh rose sharply, while the volume of imports remained negligible. In 2019, total trade between the two nation was valued at BTN 6720 million.

1.2.2 Trade in services

Commercial services, which constituted 99 percent of Bhutan’s total services exports in 2018, make up Bhutan’s trade in services. For the same period, the commercial services share was 97 percent of its total imports of services. Travel services and transport make up the highest share of Bhutan’s total exports of commercial services. Similarly, travel and transportation make up the top import sectors in 2010. In 2018, construction services replaced the transport sector as the second top import from Bangladesh (Table 1.2).
Table 1.2: Sectoral shares for trade in services (2010 and 2018) (in USD million)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Export 2010</th>
<th>Export 2018</th>
<th>Import 2010</th>
<th>Import 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>40.15</td>
<td>1102.95</td>
<td>41.39</td>
<td>78</td>
</tr>
<tr>
<td>Transport</td>
<td>23.64</td>
<td>71.67</td>
<td>51.57</td>
<td>53</td>
</tr>
<tr>
<td>Insurance and pension services</td>
<td>1.50</td>
<td>2.71</td>
<td>4.62</td>
<td>4</td>
</tr>
<tr>
<td>Financial services</td>
<td>0.95</td>
<td>2.05</td>
<td>0.07</td>
<td>6</td>
</tr>
<tr>
<td>Telecommunications, computer and</td>
<td>0.64</td>
<td>0.43</td>
<td>2.23</td>
<td>4</td>
</tr>
<tr>
<td>information services</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charges for the use of intellectual</td>
<td>0.01</td>
<td>0.01</td>
<td>0.17</td>
<td>0.304</td>
</tr>
<tr>
<td>property not included elsewhere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other business services</td>
<td>0.00</td>
<td>0.00</td>
<td>12.90</td>
<td>20</td>
</tr>
<tr>
<td>Construction (not including employment of expatriates)</td>
<td></td>
<td></td>
<td>22.19</td>
<td>63</td>
</tr>
<tr>
<td>Maintenance and repair services not included elsewhere</td>
<td></td>
<td></td>
<td>0.12</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: ESCAP, compiled from Trade Map, ITC.

For the period 2010–2018, travel sector exports saw a compounded annual growth of 12 percent whereas transport, at 15 percent, grew at a faster rate. In terms of imports, the construction sector exhibited the highest growth at 14 percent for the same period.

Box 1.2: Tourism and Bhutan

Bhutan is recognized in the international community as a sustainable tourism destination. In March 2019, ITB Berlin presented Bhutan with the Green Destinations Gold Award. It is a recognition of Bhutan’s undisputed effort in the preservation of its rich culture and traditions, sound and pristine environment, and the social well-being of others. A total of 315,599 foreign tourists visited Bhutan in 2019, indicating a 15.14 percent increase compared to 2018.

Major arrivals recorded are those who visit Bhutan for leisure. Visitors were made up of a total of 72,199 individuals from the Minimum Daily Package Rate (MDPR) paying countries and 243,400 from non-MDPR paying countries. The industry generated a total gross receipt of US$88.63 million from MDPR arrivals, a 3.77 percentage change relative to 2018.

Visitor arrival trends (in number of persons)

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of tourists</td>
<td>105,407</td>
<td>116,209</td>
<td>133,480</td>
<td>155,121</td>
<td>209,570</td>
<td>254,704</td>
<td>274,097</td>
<td>315,599</td>
</tr>
<tr>
<td>% change</td>
<td>10.25</td>
<td>14.86</td>
<td>16.21</td>
<td>35.10</td>
<td>21.54</td>
<td>7.61</td>
<td>15.14</td>
<td></td>
</tr>
</tbody>
</table>
In the last seven years, Bhutan has continued to demonstrate growth, with a record number of arrivals. A total of 315,599 inbound visitors were recorded in 2019, representing a growth of 15.14 percent compared to 2018 figures. Visitor arrivals crossed the 200,000 mark in 2016. With the increase in the number of visitors, revenue collection also increased.

Due to COVID-19, Bhutan suspended tourist visas and arrivals since 6 March 2020. Because of this, tourist arrivals have been almost nil. Given the high degree of dependence on tourism, accounting for more than 50 percent of services exports, the impact of COVID-19 on the sector and the overall economic growth and development in Bhutan has been severe. The pandemic has also affected other related sectors, such as hotels, transportation and restaurants. This has led to significant losses in jobs, incomes and social security.


1.3 Official Development Assistance and Aid for Trade

For most LDCs, Official Development Assistance (ODA) is crucial in their path towards development. ODA is widely recognized as an indicator of international flow of aid and can help bridge the resource gap in most of these countries. But for Bhutan, the net ODA received as a percentage of its GNI has never been very high and, in the last 10 years, averages only about 6.57 percent. In 2012, ODA share dropped dramatically and only regained its share in 2017 (Figure 1.8).

Figure 1.8: ODA inflows, 2008–2018

Source: ESCAP, compiled from OECD, DAC-CRS Aid Activities Database. See https://stats.oecd.org/Index.aspx?DataSetCode=crs1

India is one of Bhutan’s largest bilateral donors. During the visit of the Prime Minister of Bhutan to India in December 2018, the Indian Prime Minister announced INR 45 billion in financial assistance to Bhutan for its 12th FYP (2018–2023). In the fiscal year 2019–2020, financial assistance from India comprised 47 percent of the total budget. This amounted to BTN 1337.55 million. In the fiscal year 2020–2021, India’s contribution (BTN 16,502,42) made up more than 80 percent of the total external grants (BTN 20,142.85 Million) for the period.18

To address the limitations posed by the lack of infrastructure and other supply-side constraints, a portion of the ODA received by Bhutan has been directed to trade-related programmes and projects, known as Aid for Trade (AfT). Many LDCs have placed special importance on AfT projects in promoting export competitiveness and improving supply response. Bhutan’s top three priorities in the utilization of AfT are:

(i) Export diversification  
(ii) Trade policy development  
(iii) Services sector development.

Figure 1.9: Aid for trade disbursement

Figure 1.9 above illustrates that the composition of AfT has changed over the years. Transport and storage as well as agriculture, forestry and fishing have consistently received high shares in the last decade while AfT in banking and energy has drastically increased over the years. In absolute terms and relative to other LDCs, Bhutan is one of the smallest recipients of AfT among LDCs. And as a proportion of fixed capital formation, this figure becomes even smaller (Figure 1.10).

Figure 1.10: Aid for Trade – Bhutan compared to other LDCs

In terms of top contributors to Bhutan’s AfT, new organizations and countries have been added to the mix since 2006/2008. Figure 1.11 below shows that Japan’s significant share declined from 50 percent in 2006/2008 to 39 percent in 2017, while new countries such as Australia and Austria were added.

**Figure 1.11 Top donors, 2006/2008 and 2017**

Source: ESCAP, compiled from Aid for Trade at a glance, 2019, WTO.

**Box 1.3: Challenges emerging from the COVID-19 crisis: observed and expected impacts**

What began as a health emergency, COVID-19 escalated into a worldwide social and economic crisis more severe than the Great Recession of 1930. With all national economies exhibiting signs of a slowdown, Bhutan is not untouched.

By 24 March 2020, the government announced a complete lockdown in efforts to curb the spread of infection in the country. With a 5.3 percent growth in GDP in 2019 (higher than the South Asia regional average of 4.3 percent), it is likely to exhibit a much smaller growth rate of 1.5 percent in 2020. Despite public health initiatives and preventive measures to address the spread of the virus and its impacts, the imposed lockdown and other rigorous measures still resulted in large-scale adverse economic impacts, while the extent of its adverse effects on people’s lives and livelihood remaining uncertain. Owing to labour shortages and low external demand, the agriculture, construction and export sectors are likely to be the hardest hit, a trend estimated to continue until 2021.

All tourist visas have been suspended since 6 March 2020. Bhutan closed its borders to tourists after the first COVID-19 case was detected on 5 March 2020. Based on preliminary reports, the restrictions on tourism resulted in losses of livelihood for around 50,000 Bhutanese workers, including hoteliers and tour guides. With more than 13,000 jobs lost due to the pandemic, youth unemployment rate increased to 11.9 percent. The impacts of the imposed lockdown on tourism also affected financial institutions in the country, as the number of non-performing loans (NPL) increased. Hotels and restaurants which were forced to close during this period reneged on their loans. This amounted to BTN 836.2 million (about US$11.9 million) or 13 percent of total NPLs of banks.

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On 25 March 2020, the government of Bhutan banned the importation of certain fruits, vegetables and meats to further curb the spread of virus. This, however, exposed the country’s vulnerability in the area of food security, requiring about BTN 944 million or an equivalent of 31 percent of the 12th FYP budget allotted for the sector. Furthermore, revenues from exports, particularly commodities, manufacturing and electricity, are expected to decline due to the fall in economic activities in India and Bangladesh.

India serves as an important source and market for goods and commerce of Bhutan and provides access to transit hubs for its goods. For example, Bhutan’s Dungsam Cement Corporation was affected by the lockdown in India owing to dwindling export volumes and revenues, though it was already experiencing challenges in exports before the lockdown. Even though there has been a rise in domestic demand, supply of products through internal routes has increased transportation costs and prices, ultimately reducing sales. Despite these setbacks, the supply of essential commodities continues on both sides. Conversely, electricity exports have not been affected by the COVID-19-related crisis. In fact, electricity production and export revenue have increased significantly in FY19/20 due to the Mangdechhu Hydro Project in August 2019. Further, Bhutan has an intergovernmental agreement with the Government of India on hydropower projects, where India buys all surplus electricity from Bhutan.

To further facilitate the movement of industrial raw materials and goods, India opened an additional trade route under Jaigaon Land Customs Station (LCS). As a temporary measure and in response to a request to facilitate export of boulders and riverbed materials to India and Bangladesh, the Ahllay, Pasakha route was opened on 15 July 2020. This is to allay the increase in transportation costs and address the load capacity restrictions of river bridges to export the products through the nearest permanent LCS (Loksan-Bhimtar).

Bhutan is almost on the verge of graduating from the LDC category, and a decision on a prolonged transition period or deferment of graduation date may be discussed in the February 2021 review meeting of the Committee for Development Policy. The economic slowdown in Bhutan and in its important markets, coupled with supply-side constraints will contribute to its post-graduation challenges. Some opportunities from the transition period of graduation will be lost as major markets are not expected to recover to pre-COVID levels, resulting in a slump for Bhutan’s exports. The situation may also create additional problems of losing Duty Free Quota Free status and status under the Generalized System of Preferences for LDCs in certain markets.

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22 See https://www.macmap.org/covid19.
1.4 The World Trade Organization and Regional Trade Agreements

1.4.1 Accession to the WTO

Bhutan was granted WTO observer status in April 1998 and application for membership was submitted in September 1999. Bhutan’s Working Party was established on 6 October 1999 to facilitate the country’s accession.

WTO membership entails adherence to the WTO covered agreements. The WTO agreements include an umbrella agreement—the agreement establishing the WTO—and the agreements relating to trade in goods (GATT and other goods agreements), trade in services (GATS) and trade-related aspects of intellectual property rights (TRIPS), as well as the Dispute Settlement Understanding (DSU) and the Trade Policy Review Mechanism (TPRM).

With the exception of the Plurilateral Trade Agreements, a member is enjoined to comply with all agreements as a single package. WTO accession is a negotiating process between the acceding government and Members, where:

a. The basic requirement is to bring the applicant’s foreign trade regime in compliance with the WTO requirements (with some flexibilities for developing countries and LDCs), while Members may ask for additional commitments on rules, based on the state of play on the applicant’s foreign trade regime.

b. Terms of access to acceding to a government’s markets of goods and services are to be negotiated, bilaterally, with interested Members. Thus, WTO accession is associated with a process of domestic reforms necessary to achieve WTO compliance, which should take place before the actual accession and be completed by Day 1 of Membership (with some exceptions if transition periods have been negotiated).

Accession benefits can broadly be divided into benefits associated with WTO membership per se (i.e. the rights which the acceding government gains when it becomes a WTO Member); and benefits associated with accession-related domestic reforms (i.e. benefits derived from compliance with the accession-specific obligations). These are:

a. Non-discriminatory access to markets of other WTO Members (including, but not limited to, the application of the Most Favoured Nation (MFN) and National Treatment principles and recourse to preferential treatment as an LDC).

b. The WTO is a forum for trade negotiations. As a Member, Bhutan would have a means to influence the formulation of new multilateral trade rules (including those on preferences granted to LDCs), which are adopted by consensus.

c. Members are provided a set of transparency instruments allowing them access to information on the trade regimes of other Members, including through the WTO Trade Policy Review Mechanism and notifications.

d. Bhutan would have access to the WTO Dispute Settlement mechanism challenging WTO-inconsistent measures of other Members if they are deemed contrary to its economic and trade interests.

e. Bhutan would benefit from enhanced technical assistance and capacity-building provided by the WTO Secretariat, including targeted post-accession assistance.

f. The accession may enhance capacity for domestic economic coordination and efficiency and thus would accelerate trade and GDP growth.


For more information on the process, please see WTO document WT/ACC/22/Rev.1 of 5 April 2016.
From 1999 to 2008, Bhutan was engaged with WTO Members discussing its accession. Several informal bilateral negotiations were also held with Australia, the United States, Canada, the European Union, China and Japan in 2007–2008 although no agreements have been signed with these countries/economies. Bhutan completed a considerable level of technical work and had reached an advanced stage in the WTO accession process by 2008. It benefited immensely from the WTO trade-related technical assistance in building the capacity of Trade, Customs and BAFRA officials. From 2009–2018, Bhutan participated in numerous regional seminars, workshops and trade policy courses; some Geneva-based thematic and specialized courses; and an internship programme organized in the framework of the WTO Technical Assistance and Training Plan.

However, in 2008, accession to the WTO was suspended as Bhutan had serious reservations over some of the changes it would have to undergo to become and as a member of the WTO. An important area of concern was the impacts of joining the WTO on the development philosophy of Gross National Happiness. Two opposing views have emerged in Bhutan on this issue. One view is that joining WTO and being WTO-compliant would help attract foreign investments. Also, some of Bhutan’s largest trading partners, like India, are already WTO Members; continuing trade with them on an equal footing as a WTO Member will generate trade benefits for Bhutan.

However, some argue that without safeguards as a WTO Member, Bhutan’s market may be flooded with foreign goods and the unhealthy influx of goods, services and foreign competition may ruin its growing Micro, Small and Medium Enterprises (MSME) sector. Also, it was pointed out that since India and Bangladesh, Bhutan’s top two markets, are already part of bilateral preferential agreements and members of SAFTA, accession to the WTO will not benefit Bhutan’s exports; rather, Bhutan will only become a market for other WTO members.

Accession to the WTO means that the country has to give binding commitments in liberalization of goods and services and its adherence to many other agreements of WTO. Irrespective of the suspension of talks with the WTO, Bhutan has moved ahead of its autonomous liberalization and harmonization of certain policies within the broader WTO framework.

For example, Bhutan has formulated its Intellectual Property Policy broadly based on the WTO TRIPS agreement. Similarly, it is working to establish testing and research laboratories to comply with the Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT) measures of other countries, especially India. It is also participating in the setting of South Asian Association for Regional Cooperation (SAARC) Standards where, except for Bhutan, all other countries are WTO Members, and discussions are broadly based on WTO principles. Thus, Bhutan is also harmonizing its domestic laws with WTO rules, even as it maintains its observer status. It is envisaged that accession will not overburden its policymaking processes in these areas.

In terms of its schedule of commitments for tariff liberalization on goods, the WTO allows separate binding commitments for agriculture and non-agriculture items. During the Working Party discussions, Bhutan offered to bind its tariff on agriculture to be around 50 percent and on non-agriculture items at 26 percent. These tariff bindings are still higher and are above or at least at par with its existing level of applied tariff (Table 1.3). With this level of commitment, Bhutan is not required to reduce its applied tariff to comply with WTO binding commitments. However, given that it is now at the doorstep of graduation, and since earlier negotiations were held some 12 years ago, these can be reopened by the WTO Members in new talks.

Thus, Bhutan missed an opportunity to accede to the WTO as an LDC, which it may have done with lesser obligations. While the same position may continue in new discussions with the WTO, there is no assurance that this will be so. However, regardless of the level of bindings that Bhutan takes in the WTO, given that around 90 percent of its imports come from India at zero duties, these bindings will remain theoretical.

Table 1.3: Bhutan’s current tariffs

<table>
<thead>
<tr>
<th>Summary</th>
<th>Total</th>
<th>AG</th>
<th>Non-AG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simple average MFN applied (2019)</td>
<td>22.1</td>
<td>41.9</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Notes: MFN = Most Favoured Nation; AG = agriculture; Non-AG = non-agricultural.
Source: WTO – Country tariff profile of Bhutan.

Moreover, as Bhutan negotiates a preferential trade agreement (PTA) with Bangladesh and remains part of the Bay of Bengal Initiative for Multi-sectoral Technical and Economic Cooperation (BIMSTEC), its commitments in goods to the WTO will have minimal impact on its imports. On the other hand, becoming a Member of the WTO will give Bhutan a larger platform to participate in trade negotiations and seek technical assistance from the WTO and other countries.

Bhutan’s offer in services covers only one third of the total subsectors of services. In fact, services provide greater flexibility to any country in terms of its domestic regulations, which can control trade in services. Bhutan is already reaping the benefits of its tourism industry, which has been generating good revenues pre-pandemic.

Most of the other countries’ interests can be classified in Mode 3 (Commercial presence), where commitments need to be made for FDI capping to establish a commercial presence. Through FDI, Bhutan has also liberalized many services sectors: business services, communication, construction, education and financial, as well as transport services among others. It is expected that demand from WTO Members will be for financial services and retail. But given Bhutan’s population size, it is not foreseen that commitments in the WTO will result in a surge of investments for commercial presence. Nevertheless, it is suggested that Bhutan re-engages WTO Members in discussions to determine expectations, re-evaluate its position, based on stakeholder consultations and analyses, and articulate its position on this issue.

Given that Bhutan’s graduation from LDC status is imminent, the terms and conditions of its accession may change, and WTO Members may ask Bhutan to liberalize more than what it would have committed as an LDC WTO Member. WTO accession entails making difficult decisions and undertaking more commitments due to the numerous demands from Members. For Bhutan, this may imply greater scrutiny of its trade regime and involve undertaking commitments in new areas involving institutional reforms (e.g. WTO commitments related to TRIPS). These will be demanding on both resource commitments as well as administrative reforms.

When a significant part of trade is governed through bilateral trading agreements, the need for multilateral trading agreements becomes less appealing. Small exporting countries like Bhutan will have to evaluate its current trade costs and position and the anticipated benefits vis-à-vis required commitments if it decides to reopen talks for its accession to the WTO. Yet, if Bhutan accedes to the WTO while remaining in the LDC category, it would be able to make full use of the WTO LDC accession guidelines.
1.4.2 Regional Trade Agreements

Regional Trade Agreements (RTAs) can come in many forms. They can cover a partial scope agreement, called a Preferential Trade Agreement or a Free Trade Agreement, where duties are zero on substantial goods. A Comprehensive Economic Cooperation Agreement (CECA) is more complete, as it covers liberalization on goods, services and investments as well as other issues like labour, environment and intellectual property rights (IPRs).

Bhutan has existing bilateral FTA agreements with India, its single most important trading partner. While this trading arrangement will help mitigate any graduation-related consequences, Bhutan can proactively engage with other potentially vital trading partners looking for increased trading opportunities.

Table 1.4: Trade agreements of Bhutan in force and under negotiations

<table>
<thead>
<tr>
<th>Title</th>
<th>Total</th>
<th>Status</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay of Bengal Initiative for Multi-Sectoral Technical and Economic</td>
<td>Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, Thailand</td>
<td>Under Negotiations</td>
<td>CECA</td>
</tr>
<tr>
<td>Cooperation (BIMSTEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Asian Free Trade Area (SAFTA) and SAARC Agreement on Trade in</td>
<td>Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka</td>
<td>Entry into Force</td>
<td>Goods and services</td>
</tr>
<tr>
<td>Services (SATIS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bhutan–India</td>
<td>Bilateral</td>
<td>Entry into Force</td>
<td>Goods</td>
</tr>
<tr>
<td>Agreement on Trade between Bangladesh and Bhutan</td>
<td>Bilateral</td>
<td>Entry into Force</td>
<td>Duty-free access for 18 products</td>
</tr>
<tr>
<td>Bhutan and Nepal Bilateral Trade</td>
<td>Bilateral</td>
<td>Proposed</td>
<td></td>
</tr>
<tr>
<td>Bhutan–Thailand Trade and Economic Cooperation Agreement</td>
<td>Bilateral</td>
<td>Signed in 2013</td>
<td>Tax and duties exemption for the temporary importation of some products for non-commercial purposes</td>
</tr>
</tbody>
</table>

Source: ESCAP, compiled from various sources.

RTAs with some of its major trading partners (see Table 1.4) can help Bhutan look for new trading opportunities in the post-graduation era. In this regard, Bhutan can consider expanding the scope of its agreement with Bangladesh, which is under review. It can also expand its exports to India, taking advantage of India’s rapid economic expansion and the existing bilateral free trade agreement between them. Bhutan can maximize its existing market access to India by seeking support in securing FDI in the region or elsewhere. Bhutan’s proximity relative to the markets of China and India and other regional South Asian partners experiencing rapid growth presents a huge exports market for its products and services. Although lacking progress, the BIMSTEC free trade agreement could be another opportunity for expanding trade with Myanmar and Thailand.

Graduation may not, however, affect Bhutan’s exports even though it will have to comply with a higher local value-added content (10 percent more than when an LDC) to avail of the benefits under free trade agreements, preferential trade agreements or comprehensive economic cooperation agreements (CECAs). Since Bangladesh, Nepal and Bhutan are all SAFTA members, Bhutan will have market access to both of these other countries, but with a reduced list of concessions, as it will no longer receive special and differential trade treatment once it graduates from its LDC status.
1.5 LDC graduation: issues and challenges

The UN’s Committee for Development Policy assesses the LDC status of countries once every three years on a rolling basis. The assessment is carried out based on three criteria: (i) Per capita GNI (in USD), (ii) the Human Assets Index (HAI), and (iii) the Economic Vulnerability Index (EVI). As discussed earlier in this chapter, Bhutan has had significant improvements in its economic performance.

Bhutan has met the thresholds for per capita GNI and the HAI. When it met the criteria for a second time in the consecutive triennial review of 2018, Bhutan became eligible for recommendation for graduation in 2021 (Table 1.5). However, the graduation process has been deferred, as Bhutan aimed for the graduation process to be complete by 2023. This will coincide with the conclusion of the ongoing 12th FYP, which envisages policy programmes to ensure a smooth transition from its LDC status.

Table 1.5: Bhutan’s LDC graduation timeline

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Thresholds</th>
<th>2006</th>
<th>2009</th>
<th>2012</th>
<th>2015</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per capita GNI (USD)</td>
<td>Inclusion thresholds</td>
<td>749</td>
<td>905</td>
<td>992</td>
<td>1,035</td>
<td>1,025</td>
</tr>
<tr>
<td></td>
<td>Graduation thresholds</td>
<td>900</td>
<td>1,086</td>
<td>1,190</td>
<td>1,242</td>
<td>1,230</td>
</tr>
<tr>
<td></td>
<td>Bhutan’s situation</td>
<td>690</td>
<td>1,487</td>
<td>1,700</td>
<td>2,277</td>
<td>2,401</td>
</tr>
<tr>
<td>Human Assets Index (HAI)</td>
<td>Inclusion thresholds</td>
<td>58</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Graduation thresholds</td>
<td>64</td>
<td>66</td>
<td>66</td>
<td>66</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Bhutan’s situation</td>
<td>44.4</td>
<td>58.6</td>
<td>59</td>
<td>67.9</td>
<td>72.9</td>
</tr>
<tr>
<td>Economic Vulnerability Index (EVI)</td>
<td>Inclusion thresholds</td>
<td>42</td>
<td>42</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Graduation thresholds</td>
<td>38</td>
<td>38</td>
<td>32</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Bhutan’s situation</td>
<td>46.6</td>
<td>0.12</td>
<td>6</td>
<td>40.2</td>
<td>36.3</td>
</tr>
</tbody>
</table>

Note: The green colour reflects that the criteria to graduate was met, while the red colour indicates that the criterion has not been met. Sources: UNESCAP SSWA (2020); CDP.

Though graduation of a country from LDC status is a significant breakthrough aimed to open new development pathways, it also brings a new set of challenges, as countries stand to lose after a few years of transition, specific benefits and entitlements they used to enjoy. These benefits include: support for concessionary development finance and technical assistance; trade preferences; and special and differential treatment with respect to various multilateral trade rules and regulations.

Upon graduation, they lose access to many privileges and International Support Measures (ISMs), exclusively available for LDCs, such as withdrawal of certain unilateral and non-reciprocal trade preferences granted under Duty-Free Quota-Free (DFQF) schemes; and flexibilities allowed under special and differential treatments under multilateral trade rules (WTO agreements) as well as PTAs and RTAs. However, Bhutan is different from many other LDCs in two respects: first, its overwhelming trade dependence with India and a bilateral trade agreement that will remain effective even after LDC graduation; and it is not a Member of the WTO and therefore, not obligated to implement WTO provisions.

31 For details on these criteria, see CDP triennial review reports.
32 For detailed discussion on graduation issues of South Asian LDCs, see UNESCAP SSWA (2020), "Towards Sustainable Graduation of South Asian LDCs in the aftermath of COVID-19: Challenges, Prospects and Policy Lessons", UNESCAP South and South-West Asia Office.
In terms of general development assistance measures, a wide range of financial and technical assistance mechanisms are provided to support diverse sustainable development requirements of LDCs ranging from addressing structural imbalances, delivery of public services and infrastructure development to environment and climate action measures. There is also a predominant share of various development assistance funds and programmes, delivered through the ODA mechanism, consisting of grants, concessional loans and untied aid, most of which are not strictly linked to a country’s LDC status. Also, major multilateral donors often have their own formal eligibility criteria for concessional windows.

The World Bank has classified Bhutan as a lower-middle income country; and this status may remain even after graduation. Given its good performance in cutting poverty incidence by two thirds in the last decade, its high average annual GDP growth and a GNI per capita of US$3,080 in 2018, the graduation may impact concessional loans that the Asian Development Bank (ADB), the World Bank, and other financial institutions have made available. However, the situation will be different with donor countries, where the concessional loans or grants come in view of larger political engagement and bilateral relations.

Other major instruments contributing to development assistance include the (a) UN Capital Development Fund (UNCDF), (b) Technology bank for LDCs, (c) Investment Support Programme for LDCs (ISP/LDCs), which provides legal aid for investment-related negotiations and dispute settlement, and (d) special programmes and terms for LDCs in the United Nations system.

Finally, graduation is anticipated to result in the loss of technical and financial support, certain LDC-specific mechanisms and changes in sources of external development assistance channelled to or earmarked for social development spending. However, the likelihood of drastic cuts in external development assistance is not expected in the bilateral context. It must also be considered that socio-economic gains were achieved in the context of reducing the relative significance of net ODA. Possibilities of a gradual shift to diverse financing sources can help Bhutan to offset a decline in external funding assistance.

**1.5.1 The SDGs and LDC graduation**

Bhutan has harmonized its 12th FYP, its graduation plan from LDC status in 2023, with the Sustainable Development Goals. Some of the measures under the eligibility criteria, particularly the Economic Vulnerability Index (EVI) are closely linked with the SDGs. Strong and sustained economic growth over the last decade has helped Bhutan to meet the graduation criteria of per capita GNI; it has also formed the basis for improvements in livelihoods, socio-economic well-being and progress towards many of the SDG targets.

The RGoB has shown its commitment towards achieving the SDGs by incorporating them into its 12th Five Year Plan (2018–2023) while also utilizing it to ensure a smooth transition from its LDC category. At the same time, steps have been taken to align the goals of achieving both its GNH and SDG aims by concentrating its efforts mainly on addressing its climate-induced vulnerabilities and upholding sustainability and gender equality and increasing support for the vulnerable groups.

However, it must be noted that Bhutan has failed to meet the EVI criteria for graduation, highlighting its vulnerability to the instability of exports and agricultural production. Any positive steps taken towards graduation is complementary to the achievement of the 2030 Agenda for Sustainable Development:

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24 Bhutan remains IDA-eligible based on the small-economy exception (see World Bank, IDA borrowing countries and Bank Policy “Financial Terms and Conditions of Bank Financing”). The DESA Impact Assessment for 2018 of Bhutan also indicates that ADB support to Bhutan is not contingent upon its LDC status.

25 This includes special targeting of LDCs in UN-led programmes and grants, including commitments for agencies such as UNDP and UNICEF to allocate a higher share of resources to LDCs.
• GNI per capita linked with Goals 8 (Decent Work and Economic Growth) and 10 (Reduced Inequality)
• HAI subindicators cover Goals 4 (Quality Education) and 5 (Gender Equality)
• EVI subindicators cut across a wide range of SDGs: 8, 2 (Zero Hunger), 9 (Industry Innovation and Infrastructure), 13 (Climate Action) and 17 (Partnership for the Goals).

Bhutan can utilize its momentum to address the long-term post-graduation strategies in achieving poverty reduction, increasing productive capacity, domestic resource mobilization and market diversification. The main challenge that Bhutan now faces is the effective implementation of these strategies through appropriate policies.

The process of Voluntary National Reviews (VNRs) under the SDGs is an important national exercise, which can benefit graduation strategies in many ways. As a comprehensive evaluation process done at the national level, VNRs of South Asian LDCs can help identify relevant SDG priorities for the country, including cross-cutting elements with LDC graduation. VNRs help strengthen policy coherence, encourage multi-stakeholder partnerships and explore financing options and ways to pool resources for SDG implementation. The VNR processes are important opportunities to develop integrated plans for the SDGs and LDC graduation.

1.5.2 Loss of preferential market access

As an LDC, Bhutan receives Duty-Free Quota-Free preferences from developed as well as some developing countries, despite the fact that it is not a WTO Member. After graduation, Bhutan will lose these DFQF preferences. However, less than 10 percent of its exports are to countries that grant DFQF. Thus, upon graduation, Bhutan will lose its zero-duty market access to these markets, which is mainly in the EU.36

It will, however, still be eligible for EU’s Generalized System of Preferences (GSP). GSPs are reduced rates of duties granted by developed countries/markets like the EU to developing countries. Using the partial equilibrium model, the WTO and the Enhanced Integrated Framework report37 identified that the largest export reduction of Bhutan post-graduation will be to the EU market. However, total losses in exports will be smaller due to the increase of Bhutan’s exports to India. Simulations project that there will be a substantial shift in Bhutan’s export destinations, from the EU towards India, which will be concentrated in minerals, metals and chemicals.

Part of a smooth graduation strategy is for Bhutan to continue to benefit from DFQF market access to developed countries, including the EU for three more years after its official graduation. Therefore, it may be useful for Bhutan to explore its eligibility for GSP+38 and work towards meeting the conditionalities for entering the programme. Though Bhutan will be eligible for GSP or GSP+ treatment, the criteria for the rules of origin will be more onerous and stringent than what is usually given to LDCs. Hence, in most cases, except for primary agricultural products, minerals and ores, it would be difficult for Bhutan to qualify for GSP.

36 See Chapter 6.3 for more details on the impact of graduation on market access.
38 EU’s Special Arrangement for Sustainable Development and Good Governance (GSP+). GSP+ grants duty free access to 66 percent of EU tariff lines (in addition to products that are subject to zero MFN duties). Countries must ratify 27 conventions on human rights, labour rights, environmental protection and good governance as a condition for eligibility.
Looking at other trading partners in Asia, both China and Thailand provide DFQF market access to LDCs. However, China has not extended its DFQF scheme to Bhutan; thus, the impact of graduation will have no implication for its access to Chinese markets. In the case of Thailand, 73 percent of the tariff lines are exempted from duties. Post-graduation, Bhutan will lose this preferential market access, but the impact is not expected to be significant, as total exports to the country comprise a very small part of Bhutan’s trade.

Bilateral preferential trade agreements, with India and Bangladesh, regulate the bulk of Bhutan’s trade. Thus, graduation is not expected to significantly affect its exports in the short- and medium-term.

Bhutan’s prospects for sustaining a higher development trajectory following graduation will depend on the steps it takes to ensure better preparedness. Though the eventual withdrawal of LDC-centric trade-related international support measures (ISMs) may have short- to medium-term readjustment costs, there are consultative mechanisms in place to either retain or extend several of these ISMs to minimize negative impacts. For external support channelled to development reforms, specifically those that pertain to structural transformation, diversification and modernization, withdrawal is not expected to be immediate and will be available in various forms post-graduation. In most cases, such as in the case of trade facilitation, transport connectivity and supply-side bottlenecks, alternative modes of support are available from a range of sources. In certain cases, such as environmental risks and vulnerabilities, new sources of external assistance are emerging.

1.6 Areas of capacity-building

Bhutan must undertake domestic reforms for its development transition. The country will need to commence institutional readjustments; ensure strong governance, delivery, focused planning and implementation; and embrace new digital technologies. It will also have to build public and private capacities, strengthen the financial base, negotiate with development partners, enter into global partnerships and agreements, and utilize platforms provided by the international community and benefactors.

A series of consultations held by UNESCAP in 2019 helped identify several areas requiring technical and capacity-building assistance by the graduating LDCs of South Asia, including Bhutan. With respect to trade, apart from the loss of preferential market access and special trade privileges, the critical areas requiring support in the context of graduation were identified as: the lack of effective reciprocal RTAs/FTAs to protect trade interests; a lack of sufficient trade negotiation skills; capacity constraints related to compliance with standards; a lack of market and product diversification; and diminishing export competitiveness due to inadequate trade facilitation measures.

Apart from the challenges directly related to trade, sectoral issues such as falling agricultural productivity, skill mismatches in the labour market, the low profitability of small-scale manufacturers and exporters, insufficient investments in skills development and research and development, investment gaps in infrastructure, low levels of financial inclusion, high capital borrowing costs, limitations of resource mobilization, and a lack of entrepreneurial skills were identified as some of the additional challenges pertaining to overall sustainable development. Specific recommendations for technical assistance requirements with respect to (i) research, (ii) policy advisory, and (iii) training are summarized as follows:
### Box 1.4: Select areas of technical and capacity-building support

#### Research
- Sectoral graduation impact assessment
- Trade prospects analyses, including scope for product and market diversification
- Scope for FTA/RTA engagements
- Feasibility studies on prospects for enhancing value-addition and participation in global value chains (GVCs)
- Institutional capacity-gap analysis for the private and public sector
- Impact of new technologies on employment generation
- Ways to strengthen market access through South–South cooperation
- Comprehensive studies on regulatory requirements to address the challenges of graduation

#### Policy advisory
- Policy options to sustain access to EU and other key markets through GSP+ or other alternative preference schemes
- Areas and priorities for RTA/FTA negotiations
- Measures to improve export competitiveness
- Measures to improve data and statistical capacity
- Measures to improve environmental sustainability
- Strategies for vocational training to keep up with rapid advancements in technology and the future of job opportunities
- Effective utilization of ISMs available during the preparation and transition period and post-graduation

#### Training
- Trade negotiation skills for multilateral and FTA/RTA negotiations
- Capacity-building workshops for officials on graduation challenges and coping strategies
- Knowledge sharing with graduating LDCs
- Workshops for the private sector on export prospects, compliance, upgrading, product diversification and value-addition
- Training on statistical and data-analysis capacities as well as knowledge and training on modelling and policy analysis tools
- Training on industrial skills, certification, entrepreneurship, development and management


### Box 1.5: The 21st Century Economic Roadmap: Recommendations for the way forward

As a landlocked LDC, Bhutan faces several impediments to increase its trade. It suffers from limited resources, limited production and dependence on India for its trade and transport. In this regard, it is important for Bhutan to have focused and targeted policies that generate development and improve people’s welfare, and thereby accelerate achieving its 21st Century Economic Roadmap. Some of the important steps that Bhutan can take in addressing these challenges and increase its trade are:

**(i) Mid-term Export Strategy**

Given the impending graduation of Bhutan from its LDC status, it is important for Bhutan to prepare a Mid-term Export Strategy, which can act as a catalyst towards its 21st Century Economic Roadmap. The strategy can be for the period 2021–2030, divided in parts: the transition period and post-transition period to full non-LDC status. The strategy must be formulated on the basis of a critical assessment of Bhutan’s strengths, weaknesses, opportunities and challenges faced by its economy and the export sector. A series of discussions within the RGoB and consultations with stakeholders need to be undertaken while the strategy is currently under development. The strategy should fix targets to double (e.g. in 6 years) and triple (e.g. in 10 years) its exports of goods and services, formulate products and sectors and a market matrix, and identify policy measures that would be essential to facilitate the process.
(ii) Increasing and diversifying exports

It has been noted that around 80 percent of Bhutan’s total global exports are going to India. However, this constitutes only 0.07 percent of India’s global imports. Thus, there is tremendous scope for Bhutan to increase its share in India’s market. It can follow a twin approach to this issue: first, explore how current exports can be increased; this may require increasing production in Bhutan as well as creating new supply chains. Second, conduct market research in India to identify new products with export potential.

One method to check the potential of exports is through the Unit Value calculation of products at the World Customs Organization’s six-digit Harmonized System level. A quick analysis of India’s imports from the world and Bhutan at the six-digit HS level revealed many items which India is importing from Bhutan at a much lower unit value (i.e. Bhutan is cheaper than the world average import unit values) and yet, Bhutan’s share is in the range of 0.5 percent to 30 percent. Items relating to vegetables (071190), yoghurt (040310), food and vegetable preparations (1902, 2001, 2002), juices (2009), sauces (2103) and the like fall under these categories. The low market share can be attributed to supply-side constraints and addressed by increasing production of these items. Similarly, there are many items which India imports from Bhutan, despite their unit value being higher than their world import unit value. These items also have potential for increased exports, if measures are undertaken to reduce their prices.

Bhutan also needs to explore how it can continue to enter markets where it used to receive DFQF/GSP preferences: the EU, the United States and Japan.

(iii) Niche and high value-added products

Due to its geographical location, the cost of any product increases when Bhutan wants to export it. This seriously hinders Bhutan’s chances of attracting investments to increase production. However, with its globally recognized Happiness Index and its reputation for pursuing carbon-neutral development, the Brand Bhutan initiative can be used to develop high-value niche products, for which consumers worldwide will be willing to pay any price. Herbal and agricultural products, natural drinking water, and the like can be identified and marketed. The RGoB should initiate a campaign to attract investments in these sectors by providing tax relief and initiating mass campaigns for advertisement.

Bhutan acknowledges the role that intellectual property plays in promoting and facilitating socio-economic development. In this regard, it strongly encourages innovation and creativity in every aspect of development. Bhutan has enacted the Intellectual Property Act in 2001 to regulate patents, industrial designs, trademarks and the like. This was followed by a National Intellectual Property Policy in 2018, aimed at encouraging an inventive, innovative and creative culture.

A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. Bhutan’s Industrial Property Act clearly states that a mark cannot be registered if it has deceptive features that are likely to mislead the public of the nature, quality or geographical origin of the goods or services. With Bhutan’s long cultural history and rich traditional knowledge, promoting GI is all the more important for establishing branding and niche products. However, Bhutan lacks experience and expertise in GI, despite having a GI Unit under its Industrial Property Division. Moving forward, there needs to be a renewed focus on promoting and registering GIs in Bhutan. It would also be important to prepare an online inventory of existing traditional knowledge in the country.

(iv) Creating a Special Economic Zone

Bhutan’s Industrial Policy promotes setting up industrial parks and it has been seeking FDI inflows to these parks. Four industrial parks are being located in the south of the country to minimize logistics costs and cater to foreign industries and businesses via inland waterways and local roads to ports in Bangladesh and India. Though the RGoB has been making efforts to promote
these parks, businesses continue to face challenges, such as: financing and investments; licensing policies, and ease of doing business. One option is for the RGoB to explore allowing the establishment of multi-product, multi-sectoral (goods and services) Special Economic Zones (SEZ) with a long-term tax holiday and proximity to the Indian border to cater to the needs of the Indian market.

(v) Use of technology and ICT to promote trade

Technology and ICT are two important enablers to transform Bhutan’s socio-economic development trajectory. To achieve the 21st Century Economic Roadmap goals and economic transformation, leveraging technology and ICT will be important. These tools are important to promote trade during this time, when lockdowns hamper Bhutan’s growth.

This could be a good turning point for select sectors of Bhutan and addresses its limitation as a landlocked country. In 2019, Bhutan formulated guidelines on e-commerce, recognizing the importance of online tools and the internet in promoting trade and economic development. The guidelines also prescribe that an individual, organization or agency must apply for a licence before starting e-commerce trade. At times, licensing procedures become deterrents to the overall aims and objectives of their policies. It might be useful for the RGoB to consider not making licensing mandatory to individuals, organizations and agencies that have already obtained a trade licence (valid for trade in goods and services in the “traditional” sense). Instead, existing trade licences can cover trade through e-commerce. Making this automatic and allowing them to simply inform the relevant RGoB agency for its records will help facilitate e-commerce business. To further promote e-commerce, the RGoB must also facilitate Internet and mobile connectivity to the remotest areas, as this can help promote rural and ecotourism through e-commerce (see Chapter 9 for ongoing initiatives to accelerate the adoption of ICT tools and e-commerce for trade development, including the E4T project supported by the EIF).

(vi) Reducing trade cost

Bhutan should accelerate its accession to the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific. This can help reduce Bhutan’s disadvantages as a landlocked country. Its early accession to the Framework Agreement would send a clear signal of the high-level commitment and vision of the country’s leadership in harnessing the benefits of trade digitalization and engage in the fast-growing digital economy. This would increase the possibility of securing support from development partners in developing hard and soft infrastructure for trade digitalization and e-commerce and provide Bhutan the opportunity to shape priorities and activities undertaken under the Framework Agreement, ensuring that these are fully aligned with national objectives.

(vii) Pro-active engagement with the private sector

In recent years, there has been greater awareness of the need to engage the private sector directly in policy dialogue, particularly in trade negotiations related to enhanced market access. The capital-intensive hydropower sector currently provides limited employment; thus, businesses or activity that generate large-scale employment need to be fuelled by the private sector. Fostering private enterprises will make the economy more resilient, boost economic efficiency and spur diversification. It is important to more proactively engage with the private sector in formulating post-graduation policies and drawing national development plans.
1.7 Conclusion

Bhutan is anticipated to graduate from the Least Developed Country category by 2023. While the unprecedented socio-economic impacts of the COVID-19 pandemic may dampen and/or exacerbate challenges to Bhutan’s sustainable transition, the Committee for Development Policy may take a holistic view in its meeting scheduled in February 2021 to review progress made by graduation-aspiring LDCs. Despite its disadvantageous geographical location, Bhutan has progressed well on the socio-economic front. This will serve as a cushion for the adverse impacts that may be encountered as the country transitions after its graduation. Bhutan has already moved ahead with its 12th Five Year Plan, SDG achievements, and its 21st Century Economic Roadmap.

On trade-related issues, Bhutan’s proximity to India and being landlocked has made it more dependent on India, with which it has an existing bilateral trade agreement, surpassing other tariff concessions it has received. Thus, it will continue to benefit from and enjoy the same level of market access with India, even after its graduation. Graduation will not affect Bhutan’s market access to its relatively important markets, Bangladesh and Nepal. This is due to SAFTA and ensuing bilateral negotiations. However, it can be faced with excessive trade costs, which needs to be addressed through enabling policies of trade facilitation and the use of technology and ICT-based applications. It would also be important for Bhutan to consider and evaluate the advantages and disadvantages of availing GSP+ benefits in the EU.

Given the certainty of its graduation, Bhutan also needs to consider its position on acceding to the WTO. The process of accession to WTO will be more time-consuming and may require higher commitments of liberalization than what could have been agreed decades ago. Its decision in this regard should be informed by evidence-based research and much wider consultations with stakeholders.

The overall development strategy of Bhutan can be based on effective partnerships with international agencies as well as its partner countries, as it requires technical assistance and capacity-building in a range of areas. A trilateral cooperation framework would be very important: it should include a long-term plan to enhance the capacity of policymakers to formulate evidence-based policies; engage the private sector for increased product and market diversification; and secure more intellectual property rights for their products.
Annex to Chapter 1: Additional market access to India – unit value landing price calculations

In 2019, India imported a total of 4,918 items worth US$478.89 billion. In the same year, the amount of India’s imports from Bhutan was only US$249.28 million (only 0.05% of India’s global imports) covering 205 items. The highlights are:

<table>
<thead>
<tr>
<th>UV position</th>
<th>Number of 6-digit HS lines</th>
<th>India’s imports from Bhutan in USD million</th>
<th>Share in India’s total imports from Bhutan (US$249.28 million)</th>
<th>Remarks and way forward</th>
</tr>
</thead>
<tbody>
<tr>
<td>No UV as quantity not available</td>
<td>10</td>
<td>29.440</td>
<td>11.9%</td>
<td>High potential of exports – - Consult related producers - Identify their supply-side constraints - Policy intervention for promoting exports of these products</td>
</tr>
<tr>
<td>Lower UV of Bhutan*</td>
<td>90</td>
<td>184.338</td>
<td>73.9%</td>
<td>Highest potential – - Consult related producers - Identify how they can export more - Enhance production? - Focused approach for a marketing strategy in India</td>
</tr>
<tr>
<td>Higher UV of Bhutan</td>
<td>105</td>
<td>35.500</td>
<td>14.2%</td>
<td>Further examine – despite high costs, why does India continue to import from Bhutan? Address the supply-side challenges</td>
</tr>
<tr>
<td>Higher UV but less than 10%</td>
<td>16 (subset of 105 above)</td>
<td>17.95</td>
<td>7.2% (half of above)</td>
<td>Potential – if costs are reduced, the Indian market can be captured as it is without duties, whereas from the rest of world, a duty is charged by India, thus this 10% disadvantage is manageable</td>
</tr>
</tbody>
</table>

Note: * India’s global imports on these items is US$15 billion. If Bhutan can only increase the exports in these 90 highest potential items to India, it can increase its exports by many times as the existing imports on these items is 60 times more than Bhutan’s total exports of US$249.28 million*

Sources: UNESCAP SSWA (2020); CDP.
Of these 205 items, 90 items where the UV is lesser are as below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>HS Code</th>
<th>Product Description</th>
<th>India’s imports from world in US$1,000</th>
<th>India’s imports from Bhutan in US$1,000</th>
<th>Bhutan share</th>
<th>Cheaper by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>846140</td>
<td>Machine-tools; gear cutting, gear</td>
<td>98,381.87</td>
<td>0.838</td>
<td>0.00%</td>
<td>99%</td>
</tr>
<tr>
<td>2</td>
<td>321410</td>
<td>Mastics; painters’ fillings</td>
<td>71,436.81</td>
<td>66.84</td>
<td>0.09%</td>
<td>96%</td>
</tr>
<tr>
<td>3</td>
<td>252620</td>
<td>Steatite; natural, crushed, powdered</td>
<td>4,791,547</td>
<td>1,045</td>
<td>0.02%</td>
<td>96%</td>
</tr>
<tr>
<td>4</td>
<td>251830</td>
<td>Dolomite ramming mix</td>
<td>2,468.31</td>
<td>9.49</td>
<td>0.38%</td>
<td>94%</td>
</tr>
<tr>
<td>5</td>
<td>440290</td>
<td>Wood; charcoal of wood other than bamboo</td>
<td>4,787,085</td>
<td>30.887</td>
<td>0.65%</td>
<td>94%</td>
</tr>
<tr>
<td>6</td>
<td>210610</td>
<td>Protein; concentrates and textured</td>
<td>64,095.09</td>
<td>201.079</td>
<td>0.31%</td>
<td>93%</td>
</tr>
<tr>
<td>7</td>
<td>843039</td>
<td>Coal or rock cutters and tunnelling</td>
<td>11,489.15</td>
<td>8.956</td>
<td>0.08%</td>
<td>93%</td>
</tr>
<tr>
<td>8</td>
<td>200880</td>
<td>Fruit: strawberries, prepared or processed</td>
<td>556,425</td>
<td>0.335</td>
<td>0.06%</td>
<td>91%</td>
</tr>
<tr>
<td>9</td>
<td>391710</td>
<td>Plastics; artificial guts (sausage )</td>
<td>1,445.773</td>
<td>0.838</td>
<td>0.06%</td>
<td>91%</td>
</tr>
<tr>
<td>10</td>
<td>842952</td>
<td>Mechanical shovels, excavators</td>
<td>77,705.14</td>
<td>4.825</td>
<td>0.01%</td>
<td>91%</td>
</tr>
<tr>
<td>11</td>
<td>39732</td>
<td>Plastics; tubes, pipes and hoses</td>
<td>27,635.91</td>
<td>6.978</td>
<td>0.03%</td>
<td>88%</td>
</tr>
<tr>
<td>12</td>
<td>281122</td>
<td>Silicon dioxide</td>
<td>55,601.36</td>
<td>946.501</td>
<td>1.70%</td>
<td>88%</td>
</tr>
<tr>
<td>13</td>
<td>200540</td>
<td>Vegetable preparations; peas (pism)</td>
<td>127,995</td>
<td>2.372</td>
<td>1.85%</td>
<td>87%</td>
</tr>
<tr>
<td>14</td>
<td>720219</td>
<td>Ferro-alloys; ferro-manganese</td>
<td>41,258.63</td>
<td>12,155</td>
<td>0.03%</td>
<td>86%</td>
</tr>
<tr>
<td>15</td>
<td>380190</td>
<td>Graphite or other carbon-based</td>
<td>40,034.01</td>
<td>13,303</td>
<td>0.03%</td>
<td>86%</td>
</tr>
<tr>
<td>16</td>
<td>210690</td>
<td>Food preparations; n.e.c. in item</td>
<td>83,066.07</td>
<td>32,599</td>
<td>0.04%</td>
<td>85%</td>
</tr>
<tr>
<td>17</td>
<td>852859</td>
<td>Monitors other than cathode-ray tub</td>
<td>164,571.1</td>
<td>0.03</td>
<td>0.00%</td>
<td>83%</td>
</tr>
<tr>
<td>18</td>
<td>262190</td>
<td>Slag and ash n.e.c. in chapter 26</td>
<td>763,595</td>
<td>94,302</td>
<td>12.35%</td>
<td>80%</td>
</tr>
<tr>
<td>19</td>
<td>380110</td>
<td>Graphite; artificial</td>
<td>28,772.53</td>
<td>5,776</td>
<td>0.02%</td>
<td>79%</td>
</tr>
<tr>
<td>20</td>
<td>841090</td>
<td>Turbines; parts of hydraulic turbine</td>
<td>6,485.076</td>
<td>49,116</td>
<td>0.76%</td>
<td>77%</td>
</tr>
<tr>
<td>21</td>
<td>392330</td>
<td>Plastics; carboys, bottles, flasks</td>
<td>40,974.42</td>
<td>276,809</td>
<td>0.68%</td>
<td>77%</td>
</tr>
<tr>
<td>22</td>
<td>650610</td>
<td>Headgear; safety, whether or not lined or trimmed</td>
<td>7,377.807</td>
<td>0.055</td>
<td>0.00%</td>
<td>73%</td>
</tr>
<tr>
<td>23</td>
<td>392310</td>
<td>Plastics; boxes, cases, crates</td>
<td>54,581.54</td>
<td>5,368</td>
<td>0.01%</td>
<td>73%</td>
</tr>
<tr>
<td>24</td>
<td>380620</td>
<td>Rosin and resin; salts of rosin</td>
<td>3,634.642</td>
<td>11,423</td>
<td>0.31%</td>
<td>72%</td>
</tr>
<tr>
<td>25</td>
<td>200939</td>
<td>Juice; of single citrus fruit</td>
<td>1,872.546</td>
<td>10,344</td>
<td>0.55%</td>
<td>71%</td>
</tr>
<tr>
<td>26</td>
<td>843031</td>
<td>Coal or rock cutters and tunnelling</td>
<td>35,703.3</td>
<td>300.94</td>
<td>0.84%</td>
<td>71%</td>
</tr>
<tr>
<td>27</td>
<td>201390</td>
<td>Sauces and preparations therefor</td>
<td>17,125.16</td>
<td>7,616</td>
<td>0.04%</td>
<td>70%</td>
</tr>
<tr>
<td>28</td>
<td>392690</td>
<td>Plastics; other articles n.e.c.</td>
<td>815,578.2</td>
<td>6,728</td>
<td>0.00%</td>
<td>68%</td>
</tr>
<tr>
<td>29</td>
<td>200989</td>
<td>Juice; of any single fruit or vegetables</td>
<td>13,613.67</td>
<td>1,343.51</td>
<td>9.87%</td>
<td>67%</td>
</tr>
<tr>
<td>30</td>
<td>720310</td>
<td>Ferrous products; obtained</td>
<td>15,875.59</td>
<td>4,958</td>
<td>0.03%</td>
<td>67%</td>
</tr>
<tr>
<td>31</td>
<td>39723</td>
<td>Plastics; tubes, pipes and hoses</td>
<td>6,804.198</td>
<td>174,672</td>
<td>2.57%</td>
<td>64%</td>
</tr>
<tr>
<td>32</td>
<td>841899</td>
<td>Refrigerating or freezing equipment</td>
<td>85,409.51</td>
<td>3,208</td>
<td>0.00%</td>
<td>63%</td>
</tr>
<tr>
<td>33</td>
<td>842951</td>
<td>Front-end shovel loaders</td>
<td>45,268.02</td>
<td>21,862</td>
<td>0.05%</td>
<td>62%</td>
</tr>
<tr>
<td>34</td>
<td>200190</td>
<td>Vegetable preparations; vegetables,</td>
<td>673.75</td>
<td>79,024</td>
<td>11.73%</td>
<td>62%</td>
</tr>
<tr>
<td>35</td>
<td>720229</td>
<td>Ferro-alloys; ferro-silicon (others)</td>
<td>28,357.6</td>
<td>1,227,725</td>
<td>4.33%</td>
<td>62%</td>
</tr>
<tr>
<td>36</td>
<td>380510</td>
<td>Terpenic oils; gum, wood or sulphat</td>
<td>194,692.9</td>
<td>23,282</td>
<td>0.01%</td>
<td>61%</td>
</tr>
<tr>
<td>37</td>
<td>210330</td>
<td>Mustard flour and meal and prepared</td>
<td>478,638</td>
<td>3.85</td>
<td>0.80%</td>
<td>59%</td>
</tr>
<tr>
<td>38</td>
<td>200899</td>
<td>Fruit, nuts and other edible parts</td>
<td>5,429.811</td>
<td>294,44</td>
<td>5.42%</td>
<td>58%</td>
</tr>
<tr>
<td>39</td>
<td>200799</td>
<td>Jams, fruit jellies, marmalades</td>
<td>8,965.69</td>
<td>249,114</td>
<td>2.78%</td>
<td>56%</td>
</tr>
<tr>
<td>40</td>
<td>261800</td>
<td>Slag, granulated (slag sand);</td>
<td>33,792</td>
<td>1,399</td>
<td>4.14%</td>
<td>55%</td>
</tr>
<tr>
<td>41</td>
<td>570420</td>
<td>Carpets and other textile floor</td>
<td>47,845</td>
<td>0.803</td>
<td>1.68%</td>
<td>54%</td>
</tr>
<tr>
<td>42</td>
<td>271500</td>
<td>Bituminous mixtures</td>
<td>2,530.089</td>
<td>195,477</td>
<td>7.73%</td>
<td>53%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>842940</td>
<td>Tamping machines and road rollers;</td>
<td>6,300.25</td>
<td>30.089</td>
<td>0.48%</td>
<td>51%</td>
</tr>
<tr>
<td>45</td>
<td>220210</td>
<td>Waters; including mineral</td>
<td>2,173.614</td>
<td>301.484</td>
<td>13.87%</td>
<td>50%</td>
</tr>
<tr>
<td>46</td>
<td>721430</td>
<td>Iron or non-alloy steel; bars</td>
<td>205.581</td>
<td>70.888</td>
<td>34.48%</td>
<td>50%</td>
</tr>
<tr>
<td>47</td>
<td>40310</td>
<td>Dairy produce; yoghurt, whether</td>
<td>41.222</td>
<td>10.649</td>
<td>25.83%</td>
<td>49%</td>
</tr>
<tr>
<td>48</td>
<td>200981</td>
<td>Juice; Cranberry (Vaccinium macroca)</td>
<td>79.397</td>
<td>20.509</td>
<td>25.83%</td>
<td>47%</td>
</tr>
<tr>
<td>49</td>
<td>200791</td>
<td>Jams, jellies, marmalades, purees</td>
<td>64.26</td>
<td>18.818</td>
<td>29.28%</td>
<td>46%</td>
</tr>
<tr>
<td>50</td>
<td>210310</td>
<td>Sauces; soya</td>
<td>2,069.838</td>
<td>7.732</td>
<td>0.37%</td>
<td>43%</td>
</tr>
<tr>
<td>51</td>
<td>847150</td>
<td>Units of automatic data processing</td>
<td>182,2917</td>
<td>0.954</td>
<td>0.00%</td>
<td>42%</td>
</tr>
<tr>
<td>52</td>
<td>220299</td>
<td>Non-alcoholic beverages</td>
<td>126,810.8</td>
<td>3,143.526</td>
<td>2.48%</td>
<td>41%</td>
</tr>
<tr>
<td>53</td>
<td>392069</td>
<td>Plastics; plates, sheets, film</td>
<td>38,579.26</td>
<td>69.847</td>
<td>0.18%</td>
<td>41%</td>
</tr>
<tr>
<td>54</td>
<td>200949</td>
<td>Juice; pineapple</td>
<td>883.673</td>
<td>12.418</td>
<td>1.41%</td>
<td>37%</td>
</tr>
<tr>
<td>55</td>
<td>220299</td>
<td>Non-alcoholic beverages</td>
<td>3,351.139</td>
<td>45.932</td>
<td>1.37%</td>
<td>38%</td>
</tr>
<tr>
<td>56</td>
<td>200979</td>
<td>Juice; orange, not frozen,</td>
<td>1,540.797</td>
<td>410.701</td>
<td>26.66%</td>
<td>32%</td>
</tr>
<tr>
<td>57</td>
<td>847420</td>
<td>Machines; for crushing or grinding</td>
<td>55,211.84</td>
<td>39.307</td>
<td>0.07%</td>
<td>30%</td>
</tr>
<tr>
<td>58</td>
<td>200949</td>
<td>Juice; pineapple</td>
<td>10,433.97</td>
<td>5.272</td>
<td>0.05%</td>
<td>32%</td>
</tr>
<tr>
<td>59</td>
<td>200912</td>
<td>Juice; orange, not frozen,</td>
<td>147.757</td>
<td>44.668</td>
<td>30.23%</td>
<td>38%</td>
</tr>
<tr>
<td>60</td>
<td>220190</td>
<td>Waters; other than mineral and aera</td>
<td>826.322</td>
<td>449.376</td>
<td>54.38%</td>
<td>37%</td>
</tr>
<tr>
<td>61</td>
<td>200912</td>
<td>Juice; orange, not frozen,</td>
<td>1,220.056</td>
<td>4.894</td>
<td>0.40%</td>
<td>22%</td>
</tr>
<tr>
<td>62</td>
<td>220900</td>
<td>Vinegar and substitutes for vinegar</td>
<td>17,679</td>
<td>47.329</td>
<td>0.27%</td>
<td>16%</td>
</tr>
<tr>
<td>63</td>
<td>200912</td>
<td>Juice; orange, not frozen,</td>
<td>210.473</td>
<td>144.967</td>
<td>68.88%</td>
<td>25%</td>
</tr>
<tr>
<td>64</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>65</td>
<td>851890</td>
<td>Microphones, headphones, earphones,</td>
<td>40,941.49</td>
<td>0.005</td>
<td>0.00%</td>
<td>8%</td>
</tr>
<tr>
<td>66</td>
<td>721420</td>
<td>Iron or non-alloy steel; bars and rod</td>
<td>123,900.9</td>
<td>335.524</td>
<td>0.27%</td>
<td>6%</td>
</tr>
<tr>
<td>67</td>
<td>720719</td>
<td>Iron or non-alloy steel; semi-finished products</td>
<td>30,499.09</td>
<td>23,432.84</td>
<td>76.83%</td>
<td>6%</td>
</tr>
<tr>
<td>68</td>
<td>720941</td>
<td>Juice; pineapple, of a Brix value not exceeding 20</td>
<td>71.573</td>
<td>0.034</td>
<td>0.05%</td>
<td>5%</td>
</tr>
<tr>
<td>69</td>
<td>940350</td>
<td>Furniture; wooden, for bedroom use</td>
<td>67,872.62</td>
<td>0.213</td>
<td>0.00%</td>
<td>5%</td>
</tr>
<tr>
<td>70</td>
<td>284910</td>
<td>Carbsides; of calcium,</td>
<td>25,291.06</td>
<td>22.915</td>
<td>0.09%</td>
<td>1%</td>
</tr>
<tr>
<td>71</td>
<td>852990</td>
<td>Reception and transmission apparatus</td>
<td>1,407,069</td>
<td>0.091</td>
<td>0.00%</td>
<td>0.0165%</td>
</tr>
<tr>
<td>72</td>
<td>854420</td>
<td>Insulated electric conductors;</td>
<td>85,248.05</td>
<td>0.239</td>
<td>0.00%</td>
<td>0.043%</td>
</tr>
<tr>
<td>73</td>
<td>720719</td>
<td>Iron or non-alloy steel; semi-finished products</td>
<td>8,168,050</td>
<td>4,386</td>
<td>0.00%</td>
<td>0.002%</td>
</tr>
<tr>
<td>74</td>
<td>720220</td>
<td>Food preparations; pasta, stuffed</td>
<td>308,032</td>
<td>152,688</td>
<td>49.57%</td>
<td>8%</td>
</tr>
<tr>
<td>75</td>
<td>851890</td>
<td>Microphones, headphones, earphones,</td>
<td>40,941.49</td>
<td>0.005</td>
<td>0.00%</td>
<td>7%</td>
</tr>
<tr>
<td>76</td>
<td>721420</td>
<td>Iron or non-alloy steel; bars and rod</td>
<td>123,900.9</td>
<td>335.524</td>
<td>0.27%</td>
<td>6%</td>
</tr>
<tr>
<td>77</td>
<td>720220</td>
<td>Food preparations; pasta, stuffed</td>
<td>85,248.05</td>
<td>0.239</td>
<td>0.00%</td>
<td>0.043%</td>
</tr>
<tr>
<td>78</td>
<td>720719</td>
<td>Iron or non-alloy steel; semi-finished products</td>
<td>8,168,050</td>
<td>4,386</td>
<td>0.00%</td>
<td>0.002%</td>
</tr>
<tr>
<td>79</td>
<td>720220</td>
<td>Food preparations; pasta, stuffed</td>
<td>85,248.05</td>
<td>0.239</td>
<td>0.00%</td>
<td>0.043%</td>
</tr>
<tr>
<td>80</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>81</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>82</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>83</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>84</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>85</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>86</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>87</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>88</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>89</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
<tr>
<td>90</td>
<td>820520</td>
<td>Tools, hand; hammers and sledge hammer</td>
<td>1,226.305</td>
<td>0.065</td>
<td>0.01%</td>
<td>0.330%</td>
</tr>
</tbody>
</table>
105 items where the UV is higher are given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>HS Code</th>
<th>Product Description</th>
<th>India's imports from world in US$1,000</th>
<th>India's imports from Bhutan in US$1,000</th>
<th>Bhutan share</th>
<th>Cheaper by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>847330</td>
<td>Machinery; parts and accessories</td>
<td>1,338,337</td>
<td>452.1</td>
<td>0.00%</td>
<td>-0.001%</td>
</tr>
<tr>
<td>2</td>
<td>853510</td>
<td>Electrical apparatus; fuses,</td>
<td>7,896,832</td>
<td>802.2</td>
<td>0.01%</td>
<td>-0.0025%</td>
</tr>
<tr>
<td>3</td>
<td>940389</td>
<td>Furniture; of cane, osier,</td>
<td>103,394.4</td>
<td>1,099</td>
<td>0.01%</td>
<td>-0.0031%</td>
</tr>
<tr>
<td>4</td>
<td>590310</td>
<td>Textile fabrics; impregnated,</td>
<td>125,543.8</td>
<td>324</td>
<td>0.00%</td>
<td>-0.0159%</td>
</tr>
<tr>
<td>5</td>
<td>853690</td>
<td>Electrical apparatus;</td>
<td>606,997.5</td>
<td>907</td>
<td>0.00%</td>
<td>-0.2388%</td>
</tr>
<tr>
<td>6</td>
<td>846693</td>
<td>Parts &amp; accessories suited for use</td>
<td>209,632.7</td>
<td>109.0</td>
<td>0.00%</td>
<td>-0.3042%</td>
</tr>
<tr>
<td>7</td>
<td>252329</td>
<td>Cement; portland, other than white</td>
<td>14,537.77</td>
<td>42,510.13</td>
<td>34.20%</td>
<td>-2%</td>
</tr>
<tr>
<td>8</td>
<td>252310</td>
<td>Cement clinkers</td>
<td>54,529.53</td>
<td>2,781.726</td>
<td>5.10%</td>
<td>-2%</td>
</tr>
<tr>
<td>9</td>
<td>200950</td>
<td>Juice; tomato, unfermented</td>
<td>103,394.4</td>
<td>109.0</td>
<td>0.01%</td>
<td>-6%</td>
</tr>
<tr>
<td>10</td>
<td>200971</td>
<td>Juice; apple, of a Brix value not exceeding 20</td>
<td>130,261</td>
<td>88.097</td>
<td>67.63%</td>
<td>-3%</td>
</tr>
<tr>
<td>11</td>
<td>283650</td>
<td>Carbonates; calcium carbonate</td>
<td>128,227.2</td>
<td>2,363</td>
<td>0.00%</td>
<td>-6%</td>
</tr>
<tr>
<td>12</td>
<td>220429</td>
<td>Wine; still, in containers holding</td>
<td>4,114.329</td>
<td>55.72</td>
<td>1.35%</td>
<td>-6%</td>
</tr>
<tr>
<td>13</td>
<td>481910</td>
<td>Paper and paperboard; cartons, boxes</td>
<td>37,834.44</td>
<td>0.02</td>
<td>0.00%</td>
<td>-8%</td>
</tr>
<tr>
<td>14</td>
<td>200580</td>
<td>Vegetable preparations; sweetcorn</td>
<td>1,444,345</td>
<td>26.65</td>
<td>1.85%</td>
<td>-10%</td>
</tr>
<tr>
<td>15</td>
<td>200559</td>
<td>Vegetable preparations; beans,</td>
<td>559,043</td>
<td>80.358</td>
<td>14.37%</td>
<td>-10%</td>
</tr>
<tr>
<td>16</td>
<td>854810</td>
<td>Waste and scrap of primary cells</td>
<td>169,406</td>
<td>54,784</td>
<td>3.03%</td>
<td>-11%</td>
</tr>
<tr>
<td>17</td>
<td>720299</td>
<td>Ferro-alloys; n.e.c. in heading no.</td>
<td>21,970.18</td>
<td>2,438.641</td>
<td>11.10%</td>
<td>-20%</td>
</tr>
<tr>
<td>18</td>
<td>261900</td>
<td>Slag, dross; other than granulated</td>
<td>11,870.59</td>
<td>146.592</td>
<td>1.23%</td>
<td>-22%</td>
</tr>
<tr>
<td>19</td>
<td>270109</td>
<td>Coal</td>
<td>20,118,683</td>
<td>51.122</td>
<td>0.00%</td>
<td>-22%</td>
</tr>
<tr>
<td>20</td>
<td>252020</td>
<td>Plasters; (consisting of calcined gypsum or calcium sulphate)</td>
<td>15,883.53</td>
<td>459.411</td>
<td>0.01%</td>
<td>-27%</td>
</tr>
<tr>
<td>21</td>
<td>270112</td>
<td>Coal</td>
<td>2,966,277</td>
<td>842.2</td>
<td>0.04%</td>
<td>-35%</td>
</tr>
<tr>
<td>22</td>
<td>846890</td>
<td>Machinery and apparatus; parts,</td>
<td>13,320.24</td>
<td>0.05</td>
<td>0.00%</td>
<td>-40%</td>
</tr>
<tr>
<td>23</td>
<td>850212</td>
<td>Electric generating sets;</td>
<td>4,848,361</td>
<td>20,513</td>
<td>0.42%</td>
<td>-44%</td>
</tr>
<tr>
<td>24</td>
<td>940310</td>
<td>Furniture; metal, for office use</td>
<td>23,360.28</td>
<td>0.213</td>
<td>0.00%</td>
<td>-48%</td>
</tr>
<tr>
<td>25</td>
<td>252010</td>
<td>Gypsum; anhydrite</td>
<td>104,951</td>
<td>6,749,686</td>
<td>6.17%</td>
<td>-56%</td>
</tr>
<tr>
<td>26</td>
<td>845929</td>
<td>Machine-tools; for drilling</td>
<td>19,921.41</td>
<td>1.89</td>
<td>0.01%</td>
<td>-56%</td>
</tr>
<tr>
<td>27</td>
<td>252100</td>
<td>Limestone flux; limestone</td>
<td>473,651.8</td>
<td>1,209,351</td>
<td>0.26%</td>
<td>-59%</td>
</tr>
<tr>
<td>28</td>
<td>731029</td>
<td>Tanks, casks, drums, boxes</td>
<td>79,758.27</td>
<td>0.333</td>
<td>0.00%</td>
<td>-66%</td>
</tr>
<tr>
<td>29</td>
<td>200591</td>
<td>Vegetable preparations; bamboo shoot</td>
<td>14,232</td>
<td>0.167</td>
<td>1.17%</td>
<td>-67%</td>
</tr>
<tr>
<td>30</td>
<td>841340</td>
<td>Pumps; concrete pumps</td>
<td>3,210.6</td>
<td>53.834</td>
<td>1.68%</td>
<td>-77%</td>
</tr>
<tr>
<td>31</td>
<td>400942</td>
<td>Rubber; vulcanized (other than hard)</td>
<td>42,538.78</td>
<td>0.05</td>
<td>0.00%</td>
<td>-79%</td>
</tr>
<tr>
<td>32</td>
<td>853890</td>
<td>Electrical apparatus;</td>
<td>595,924.8</td>
<td>34,603</td>
<td>0.01%</td>
<td>-85%</td>
</tr>
<tr>
<td>33</td>
<td>902480</td>
<td>Machines and appliances for testing</td>
<td>65,988.42</td>
<td>3,434</td>
<td>0.01%</td>
<td>-91%</td>
</tr>
<tr>
<td>34</td>
<td>843041</td>
<td>Boring or sinking machinery;</td>
<td>150,080.3</td>
<td>2,165.426</td>
<td>0.14%</td>
<td>-100%</td>
</tr>
<tr>
<td>35</td>
<td>841391</td>
<td>Pumps; parts thereof</td>
<td>289,011.4</td>
<td>5,319</td>
<td>0.00%</td>
<td>-101%</td>
</tr>
<tr>
<td>36</td>
<td>842519</td>
<td>Pulley tackle and hoists; not power</td>
<td>5,656.93</td>
<td>0.219</td>
<td>0.00%</td>
<td>-101%</td>
</tr>
<tr>
<td>37</td>
<td>392610</td>
<td>Plastics; office or school supplies</td>
<td>10,941.07</td>
<td>0.021</td>
<td>0.00%</td>
<td>-103%</td>
</tr>
<tr>
<td>38</td>
<td>441011</td>
<td>Particle board of wood,</td>
<td>41,999.5</td>
<td>1,896,304</td>
<td>4.60%</td>
<td>-103%</td>
</tr>
<tr>
<td>39</td>
<td>391731</td>
<td>Plastics; tubes, pipes and hoses</td>
<td>9,838,586</td>
<td>11,158</td>
<td>0.11%</td>
<td>-106%</td>
</tr>
<tr>
<td>40</td>
<td>843049</td>
<td>Boring and sinking machinery;</td>
<td>977,241</td>
<td>311,607</td>
<td>0.32%</td>
<td>-111%</td>
</tr>
<tr>
<td>41</td>
<td>853710</td>
<td>Boards, panels, consoles, desks</td>
<td>590,591.3</td>
<td>2,787</td>
<td>0.00%</td>
<td>-122%</td>
</tr>
<tr>
<td>42</td>
<td>940320</td>
<td>Furniture; metal, other than</td>
<td>65,629.09</td>
<td>6,736</td>
<td>0.01%</td>
<td>-149%</td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Value</td>
<td>Quantity</td>
<td>Percentage</td>
<td>Change</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>------------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Machines; for sorting, screening,</td>
<td>46,564.3</td>
<td>121,844</td>
<td>0.26%</td>
<td>-151%</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Machines; for mixing or kneading</td>
<td>21,478.64</td>
<td>6,993</td>
<td>0.03%</td>
<td>-164%</td>
<td></td>
</tr>
<tr>
<td>46</td>
<td>Aluminum; sanitary ware and parts</td>
<td>2,808,055</td>
<td>0.043</td>
<td>0.00%</td>
<td>-166%</td>
<td></td>
</tr>
<tr>
<td>47</td>
<td>Media n.e.c. in heading 8523</td>
<td>933,343.9</td>
<td>0.12</td>
<td>0.00%</td>
<td>-167%</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>Furniture; wooden, other</td>
<td>141,968.1</td>
<td>6,093</td>
<td>0.00%</td>
<td>-174%</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Paints and varnishes; based on acry</td>
<td>15,580.53</td>
<td>0.057</td>
<td>0.00%</td>
<td>-182%</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>Dairy produce; cheese, processed</td>
<td>3,852.877</td>
<td>38.28</td>
<td>0.99%</td>
<td>-174%</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Electrical transformers, static converters (for example, rectifiers) and inductors</td>
<td>599,449.9</td>
<td>0.258</td>
<td>0.00%</td>
<td>-200%</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>Machinery; parts of the machinery</td>
<td>11,145.58</td>
<td>105,358</td>
<td>0.95%</td>
<td>-203%</td>
<td></td>
</tr>
<tr>
<td>53</td>
<td>Marble and travertine; merely cut,</td>
<td>208,157.4</td>
<td>563.123</td>
<td>0.27%</td>
<td>-216%</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Units of automatic data processing</td>
<td>118,096.4</td>
<td>28.435</td>
<td>0.02%</td>
<td>-223%</td>
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</tr>
<tr>
<td>55</td>
<td>Machinery; parts of the machinery</td>
<td>11,145.58</td>
<td>105,358</td>
<td>0.95%</td>
<td>-203%</td>
<td></td>
</tr>
<tr>
<td>56</td>
<td>Optical fibres, optical fibre bundle</td>
<td>81,722.71</td>
<td>0.516</td>
<td>0.00%</td>
<td>-225%</td>
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<tr>
<td>57</td>
<td>Tools; for working in the hand (other)</td>
<td>43,018.43</td>
<td>0.058</td>
<td>0.00%</td>
<td>-227%</td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>Electrical machines and apparatus;</td>
<td>118,840.1</td>
<td>0.464</td>
<td>0.00%</td>
<td>-233%</td>
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<tr>
<td>59</td>
<td>Engines; parts, for engines</td>
<td>99,633.27</td>
<td>4.16</td>
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<td>-243%</td>
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<tr>
<td>60</td>
<td>Mathematical instruments and equipments</td>
<td>5,613.627</td>
<td>0.002</td>
<td>0.00%</td>
<td>-270%</td>
<td></td>
</tr>
<tr>
<td>61</td>
<td>Machines; concrete or mortar mixers</td>
<td>2,999,717</td>
<td>2.916</td>
<td>0.10%</td>
<td>-277%</td>
<td></td>
</tr>
<tr>
<td>62</td>
<td>Communication apparatus</td>
<td>3,465,704</td>
<td>12.836</td>
<td>0.00%</td>
<td>-323%</td>
<td></td>
</tr>
<tr>
<td>63</td>
<td>Machines; for agglomerating,</td>
<td>134,902.7</td>
<td>8.28</td>
<td>0.00%</td>
<td>-338%</td>
<td></td>
</tr>
<tr>
<td>64</td>
<td>Chain; articulated link parts,</td>
<td>10,442.31</td>
<td>0.073</td>
<td>0.00%</td>
<td>-339%</td>
<td></td>
</tr>
<tr>
<td>65</td>
<td>Millstones, grindstones, grinding</td>
<td>15,580.53</td>
<td>0.258</td>
<td>0.00%</td>
<td>-349%</td>
<td></td>
</tr>
<tr>
<td>66</td>
<td>Engines; pneumatic power engines</td>
<td>51,821.22</td>
<td>2.916</td>
<td>0.00%</td>
<td>-377%</td>
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</tr>
<tr>
<td>67</td>
<td>Pumps and compressors; parts</td>
<td>416,229.8</td>
<td>2.916</td>
<td>0.00%</td>
<td>-381%</td>
<td></td>
</tr>
<tr>
<td>68</td>
<td>Steel, stainless; tube or pipe fitting</td>
<td>12,222.55</td>
<td>1.481</td>
<td>0.00%</td>
<td>-388%</td>
<td></td>
</tr>
<tr>
<td>69</td>
<td>Hat-racks, hat-pegs, brackets</td>
<td>19,273.89</td>
<td>0.037</td>
<td>0.00%</td>
<td>-399%</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>Iron or steel; stranded wire, ropes</td>
<td>128,912.5</td>
<td>0.376</td>
<td>0.00%</td>
<td>-422%</td>
<td></td>
</tr>
<tr>
<td>71</td>
<td>Signalling apparatus; parts</td>
<td>69,245.85</td>
<td>0.2</td>
<td>0.00%</td>
<td>-460%</td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Plastics; plates, sheets, film, foil</td>
<td>205,632.2</td>
<td>0.014</td>
<td>0.00%</td>
<td>-463%</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>Engines; reaction engines, other then</td>
<td>798,248</td>
<td>5.655</td>
<td>0.70%</td>
<td>-479%</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Machinery and apparatus; gas operated surface tempering machines and appliances</td>
<td>27,828.13</td>
<td>3.204</td>
<td>0.01%</td>
<td>-518%</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Loudspeakers; multiple</td>
<td>178,875</td>
<td>0.794</td>
<td>0.00%</td>
<td>-540%</td>
<td></td>
</tr>
<tr>
<td>76</td>
<td>Boring or sinking machinery; parts</td>
<td>281,934.3</td>
<td>81.011</td>
<td>0.03%</td>
<td>-567%</td>
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</tr>
<tr>
<td>77</td>
<td>Glass; safety glass, laminated</td>
<td>23,848.07</td>
<td>0.819</td>
<td>0.00%</td>
<td>-577%</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>Machinery; parts of machines handling</td>
<td>676,857.8</td>
<td>32.911</td>
<td>0.00%</td>
<td>-613%</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Iron or steel (excluding cast iron)</td>
<td>39,706.31</td>
<td>7.421</td>
<td>0.05%</td>
<td>-666%</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>Vacuum cleaners, other</td>
<td>17,952.19</td>
<td>0.142</td>
<td>0.00%</td>
<td>-718%</td>
<td></td>
</tr>
<tr>
<td>81</td>
<td>Iron or non-alloy steel; in coils</td>
<td>12,677.73</td>
<td>6.81</td>
<td>0.05%</td>
<td>-790%</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>Dairy produce; milk and cream</td>
<td>182,63</td>
<td>0.017</td>
<td>0.01%</td>
<td>-812%</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Video recording or reproducing apparatus</td>
<td>73,417.84</td>
<td>1.283</td>
<td>0.00%</td>
<td>-884%</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>Winches; capstans; not powered</td>
<td>14,854.51</td>
<td>54.39</td>
<td>0.37%</td>
<td>-957%</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>Cranes; self-propelled derricks</td>
<td>60,135.22</td>
<td>245.208</td>
<td>0.41%</td>
<td>-1074%</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>Vehicles; with only electric motor</td>
<td>5,132.606</td>
<td>15.343</td>
<td>0.30%</td>
<td>-1225%</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>Jacks and hoists; (other than hydrated)</td>
<td>24,588.98</td>
<td>1.835</td>
<td>0.01%</td>
<td>-1316%</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>Loudspeakers; single, mounted</td>
<td>65,577.11</td>
<td>0.787</td>
<td>0.00%</td>
<td>-1423%</td>
<td></td>
</tr>
<tr>
<td>Sl. No.</td>
<td>HS Code</td>
<td>Product Description</td>
<td>India’s imports from world in US$1,000</td>
<td>India’s imports from Bhutan in US$1,000</td>
<td>Bhutan share</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>----------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>251810</td>
<td>Dolomite, not calcined or sintered;</td>
<td>81,641.67</td>
<td>29,209.91</td>
<td>35.78%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>280430</td>
<td>Nitrogen</td>
<td>927.581</td>
<td>48.852</td>
<td>5.27%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>380130</td>
<td>Carbonaceous pastes; for electrodes</td>
<td>6,621,406</td>
<td>1,149</td>
<td>0.02%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>380610</td>
<td>Rosin and resin acids</td>
<td>56,238.46</td>
<td>45,977</td>
<td>0.08%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>441231</td>
<td>Plywood; consisting only of sheets</td>
<td>47,773.83</td>
<td>0.125</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>721410</td>
<td>Iron or non-alloy steel; bars and r</td>
<td>657.476</td>
<td>6.974</td>
<td>1.06%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>730619</td>
<td>Iron or steel (excluding cast iron)</td>
<td>15,007.26</td>
<td>0.073</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>841011</td>
<td>Turbines; hydraulic turbines</td>
<td>2,789.111</td>
<td>126.848</td>
<td>4.55%</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>940330</td>
<td>Furniture; wooden, for office use</td>
<td>55,771.08</td>
<td>0.398</td>
<td>0.00%</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>999999</td>
<td>Commodities not specified according</td>
<td>199,201,4754</td>
<td>0.159</td>
<td>0.00%</td>
<td></td>
</tr>
</tbody>
</table>

10 items where UV is not determined are as below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>HS Code</th>
<th>Product Description</th>
<th>India’s imports from world in US$1,000</th>
<th>India’s imports from Bhutan in US$1,000</th>
<th>Bhutan share</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>741999</td>
<td>Copper; articles n.e.c. in heading</td>
<td>66,403.7</td>
<td>2.046</td>
<td>0.00%</td>
</tr>
<tr>
<td>90</td>
<td>841311</td>
<td>Pumps; fitted or designed to be fit</td>
<td>23,368.77</td>
<td>1.803</td>
<td>0.01%</td>
</tr>
<tr>
<td>91</td>
<td>851829</td>
<td>Loudspeakers; not mounted</td>
<td>307,928.2</td>
<td>0.144</td>
<td>0.00%</td>
</tr>
<tr>
<td>92</td>
<td>841381</td>
<td>Pumps and liquid elevators; n.e.c.</td>
<td>137,816.1</td>
<td>0.772</td>
<td>0.00%</td>
</tr>
<tr>
<td>93</td>
<td>851769</td>
<td>Communication apparatus</td>
<td>961,004.5</td>
<td>5.381</td>
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</tr>
<tr>
<td>94</td>
<td>842542</td>
<td>Jacks and hoists; hydraulic</td>
<td>10,312.86</td>
<td>10.851</td>
<td>0.11%</td>
</tr>
<tr>
<td>95</td>
<td>848340</td>
<td>Gears and gearing</td>
<td>354,755</td>
<td>0.583</td>
<td>0.00%</td>
</tr>
<tr>
<td>96</td>
<td>851718</td>
<td>Telephone sets n.e.c. in item no. 8</td>
<td>17,348.54</td>
<td>2.309</td>
<td>0.01%</td>
</tr>
<tr>
<td>97</td>
<td>841360</td>
<td>Pumps; rotary positive displacement</td>
<td>122,870.6</td>
<td>7.326</td>
<td>0.01%</td>
</tr>
<tr>
<td>98</td>
<td>853110</td>
<td>Signalling apparatus; electric</td>
<td>56,492.05</td>
<td>1.098</td>
<td>0.00%</td>
</tr>
<tr>
<td>99</td>
<td>851810</td>
<td>Microphones and stands</td>
<td>72,069.38</td>
<td>1.234</td>
<td>0.00%</td>
</tr>
<tr>
<td>100</td>
<td>850131</td>
<td>Electric motors and generators; DC,</td>
<td>194,151.9</td>
<td>0.848</td>
<td>0.00%</td>
</tr>
<tr>
<td>101</td>
<td>852580</td>
<td>Television cameras, digital cameras</td>
<td>2,083.423</td>
<td>19.088</td>
<td>0.00%</td>
</tr>
<tr>
<td>102</td>
<td>903149</td>
<td>Optical instruments and appliances;</td>
<td>79,680.03</td>
<td>127.626</td>
<td>0.01%</td>
</tr>
<tr>
<td>103</td>
<td>842129</td>
<td>Machinery; for filtering or purifying machinery and apparatus</td>
<td>154,030.5</td>
<td>13.095</td>
<td>0.01%</td>
</tr>
<tr>
<td>104</td>
<td>850133</td>
<td>Electric motors and generators; DC,</td>
<td>7,043,735</td>
<td>1,632.705</td>
<td>23.18%</td>
</tr>
<tr>
<td>105</td>
<td>846150</td>
<td>Machine-tools; sawing or cutting-off machines</td>
<td>37,175.16</td>
<td>107.09</td>
<td>0.29%</td>
</tr>
</tbody>
</table>
References


CHAPTER 2
THE SKILLS GAP, UPSKILLING AND
WOMEN’S AND YOUTH EMPLOYMENT
2.1 Introduction

This chapter builds on results from the National Workforce Plan (NWP) 2016–2022, based on the 2014 Employers Survey. The Ministry of Labour and Human Resources (MoLHR) has published a list of “scarce and critical skills” for the following priority sectors: construction, tourism and production. The results are further combined with evidence from the Employers Survey in 2017 and stakeholder consultation. The 2017 survey provides information on the constraints faced by firms in construction, education and training, information and communication technology (ICT), services and tourism, and training and key areas to address the skills gaps. The analysis highlights the skills gaps for exporting companies, cottage and small industries (CSIs), youth and women in relation to business value chains. The final section considers the policy response of the government and recommendations that could be undertaken to address changes in the medium- to long-term for skills development for the export market, CSIs, women, and youth.

The skills gap and skills shortages negatively affect youth employment. The skills gap prevents employers from finding the talent they need, resulting in high youth unemployment. The unemployment rate for youth ages 15 to 24 is 12.7 percent for youth with a bachelor’s degree, followed by 8.9 percent for youth with higher secondary level education. With a lack of skilled employees, productivity can decline and lead to slower production times and increased operation costs. On top of that, the skills gap can affect the capacity of firms to innovate, adopt technological developments, productivity, competitiveness and entrepreneurship. These are particularly damaging in sectors open to the exports market, including those identified in the Export Strategy 2012. For youth, not having the right skills can limit employment prospects and access to quality jobs going forward.

The RGoB recognized the need to address the skills gaps and shortages between the current education and training system and labour market demand that hinder development objectives. This commitment is reflected in the adoption of the Education Blueprint (EBP) 2014–2024, the Technical and Vocational Education Training Blueprint (TVETBP) 2016–2026, the TVET Policy 2013, and the National Workforce Plan (NWP) 2016–2022. These policies outline the priority areas for education and training investment over the medium- and long-term in implementing the 12th Five Year Plan and the Human Resource Development Master Plan (HRDMP) 2018–2023. The skills mismatch has been acknowledged in the Diagnostic Trade Integration Strategy (DTIS) 2012, the Economic Development Policy (EDP) 2016, the Startup and Cottage and Small Industry (CSI) Flagship Programme 2019–2023, and the 12th Five Year Plan.

2.2 Evolution since DTIS 2012

The Diagnostic Trade Integration Strategy Update (DTISU) 2020 is in line with the 21st Century Economic Roadmap (ERM). There is considerable interest from the RGoB to improve trade policy to promote exports, create jobs and undertake skills development.

39 Labour Force 2019, NSB.
Box 2.1: Summary of main achievements and setbacks since DTIS 2012

Item 1.2 of the DTIS 2012 action matrix recommended creating a group of experts to review the improvement of quality education and skills training. There are no documents or minutes detailing its implementation. The 2012 Strategy suffered from a lack of ownership, weak prioritization and weak systems for follow-up, monitoring and evaluation.

A lack of a skilled workforce emerged as the biggest inhibitor of firm growth. The shortage of a skilled workforce may be attributed to one or any of the following factors: a significant number of expatriate workers, persistent youth unemployment, a strong demand for labour from fast-growing sectors and the mismatch between the demand and supply of skills in the market. Despite the shortage of a skilled workforce, TVET institutes still have had difficulty recruiting students. This can be attributed to the mismatch between the training that existing institutes provide and the skill sets required by firms. To address workforce issues, some agencies in the construction and tourism sectors, in collaboration with the public sector, have started implementing short-term training courses for their workers. This and other similar initiatives need to be strengthened to enable long-term sustainability as well as to generate strong linkages with existing strategies. The Bhutan Innovation and Technical Education (BITE), established on 17 March 2020, aims to initiate reforms and revamp TVETs to address the shortage of trade-related skills.

2.3 Overall challenges for skills development

The gap between the demand for and supply of a skilled workforce has to be filled by making necessary structural changes in the education, TVET and training systems. This section summarizes the challenges for skills development.

2.3.1 Access to skills: challenges for CSIs

Cottage and Small Industry (CSI) represents more than 95 percent of the total industries in Bhutan. Of this percentage, nearly 80 percent of CSIs are in the service industry. Approximately 32 percent of total employed persons work in CSIs, of which 60 percent are women. The 2017 Employer Survey shows that CSIs will comprise the majority of employers in the 12th FYP, accounting for 71.52 percent of the total number of jobs making up the labour force.

CSIs are vulnerable to changes in their competitive environment and external shocks, such as the negative impacts caused by the COVID-19 pandemic. The 2017 survey reveals that 37.9 percent of firms experience difficulties attracting skilled workers, as the wages they offer are not at par with and competitive relative to that offered by bigger firms. The shortage is more prominent in cottage industries and small industries, which make up 66.5 percent and 26.7 percent of the total number of firms, respectively. Skills shortage is severe in dynamic sectors: services (23.5 percent), tourism (5.1 percent), production (4.2 percent), and ICT (2.3 percent). The Investments Climate Assessment of Bhutan (ICAB) 2017 conducted by the World Bank identified “lack of skilled and qualified workforce” as a major constraint (12.63 percent) to enterprise development.

Lack of funds makes it difficult for CSIs to train their staff. The 2017 survey showed that 55.4 percent of firms did not provide any form of training to their staff; 28.8 percent provided some training, and 19 percent of responding firms provided on-the-job-trainings (OJT). Poaching practices discourage firms to invest in skills development, as trained workers may only end up being poached by competitors. The survey shows that 54.4 percent of the respondents have suffered from employees job-hopping and being poached.

40 Country presentation for CSI for Bhutan, 21–22 November 2019, MoEA
2.3.2 Poor practices and low awareness of skills development

Most firms do not acknowledge the value of skills development as a key element of human resources development (HRD). Firms are not actively supporting skills development and there is an apparent consensus among stakeholders that skills development is not a priority. Firms are also not actively involved in the promotion of skills development, skills needs analysis or in HR policy development. Although MoLHR is the overall champion of skills development, the Ministry lacks in-house expertise to undertake training activities.

2.3.3 Lack of standardization and clarity on industry skills requirements

There is no standardization of course content, training delivery systems or curricula. This is compounded by the absence of common terms of reference and deliverables and the lack of accreditation systems. This makes it difficult to compare programmes and the effectiveness of courses offered by different training institutes as well as to determine the skills and knowledge that each course provides.

Training providers also do not appear to clearly understand the skills required by firms. There is no collaboration between firms and faculties to ensure that the skills development courses help students develop the skills important to perform the functions of jobs available in the market.

Further, there are no councils or guidelines to determine the skills required for each sector, no clear process for skills development and no workplace skills plans in place. Within the MoLHR, skills plans, if they exist, are ineffectively monitored by the accountable line department.

The results of the survey emphasized that facilitation of skills development should be the shared responsibility of all stakeholders.

2.3.4 Lack of mobility between formal education and TVET and the weakness of TVET systems

The formal education system provides limited options for vocational training, while TVET has limited options for science, technology, engineering and mathematics (STEM) learning. This lack of options makes it very difficult for a person enrolled in formal education to obtain relevant practical skills and leaves a person enrolled in TVET with limited soft skills. TVET courses restrict mobility and do not allow youth to migrate to other institutions of higher education. The new TVET reform can provide a clear educational pathway, similar to the German dual system.

TVET Graduate Study Bhutan 2020 and the Multi-Cohort Online Tracer Survey Report 2013–2018 detail several challenges:

- Due to its current supply-driven orientation, TVETs are unable to respond to the changing needs of the labour market.
- Curricula, instructional equipment, teaching methods, career orientation and evaluation techniques are outdated.
- Enrolment in TVET is seen as a backup option to general education. This is attributed to the mentality that general education is superior and leads to white-collar jobs. Poor “brand equity” and convertibility of qualifications between TVET and academic streams have been a deterrent factor. Gross Enrolment Rate (GER) for the period 2015–2019 was 4.05 percent. In contrast, GER for higher secondary education was 71.3 percent in 2018.41

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41 TVET Statistics of Bhutan 2020, MoLHR.
Gender Parity Index (GPI) was also low at 0.42 compared to 1.06 GPI for higher secondary education in 2018. The annual intake capacity was 1,690 students, representing a 15.8 percent rise in 2019 from 2018 with female enrolment at 32.31 percent.\textsuperscript{42} Timely reforms and targets are also lacking.

- People have naively believed that the main purpose of TVET is to establish “self-enterprise” and have not seen the value of skills development.

2.3.5 Curriculum inflexibility in tertiary education

Inflexibility in the curriculum negates the purpose of demand-driven skills acquisition. STEM colleges still use a content-driven approach, with most examinations giving less attention to practical application. With few exceptions, higher institutions have no tradition of partnerships with private firms. Enrolment in STEM studies has remained low with 11.6 percent of total enrolment in tertiary education in 2019. The share of female enrolment in STEM courses was about 30.6 percent compared to their male counterparts of 69.4 percent.\textsuperscript{43}

The results of the 2014 Employer Survey show that the satisfaction level for tertiary educational institutions in the “very good” category was low (38 percent to 40 percent of respondents). This indicates limited to low relevance of the curriculum to the job market. The Strategic Plan 2018–2030 of the Royal University of Bhutan (RUB) identified the following factors as challenges: lack of facilities and equipment, weak pedagogical skills, low motivation of faculty members, and lack of firm linkages and quality assurance mechanisms.

2.3.6 Inadequate ICT skills development

ICT is still at a nascent stage in Bhutan. As a result, youth are not conversant in new ICT knowledge in product design and innovation and are unable to fully exploit the growth potential of new technologies and explore job opportunities in ICT, driven by the growth of the secondary and tertiary sectors. The NWP 2016–2022 identified an overall skills gap among ICT staff. Export data processing centres and call centres have emerged and there has been increasing growth in the ICT and Business Process Outsourcing (BPO) sectors. With the new Economic Processing Zone (EPZ), there will be an increase in demand for software development, web design and data entry, which the current level of ICT skills in the market will be unable to effectively meet.

2.3.7 Inadequate capacity to deliver quality teaching

Inadequate modern learning facilities and insufficient teacher training opportunities in education and skills training institutes limit opportunities for quality teaching and learning. Bhutan’s economy in the 21\textsuperscript{st} century requires quality teaching equipped with modern facilities, supported by research and development to provide professional development prospects for teachers and a conducive learning environment to deliver technical skills relevant to the labour market.

2.3.8 Limited pre- and post-employment training

The MoLHR, in partnership with registered training providers, offers training programmes for pre- and in-service employees. More attention has been given to enhance the employability of jobseekers providing direct employment schemes, skills, training and entrepreneur development. When training is provided, the course should include firm-specific model training geared towards a nationally recognized qualification or certification. This is not clear to private training providers. Also weak are the enforcement of an effective accreditation

\textsuperscript{42} Annual Report 2018–2019, RUB
process of training providers and an assessment of the resources and delivery capacity of programmes. Employees in many CSIs lack job-specific skills, relying heavily on on-the-job training. CSIs lack the ability necessary to assess future skills needs as well as the resources to fund future training activities. More than 95.7 percent of the firms surveyed in 2017 reported that they do not have any budget earmarked for training needs. This implies that most CSIs lack a comprehensive HRD policy (that includes training) as well as the financial support to provide training for their employees.

Box 2.2: Impacts and additional challenges emerging from the COVID-19 crisis

The socio-economic repercussions of COVID-19 are hitting youth much faster and harder than other age groups. They are faced with multiple shocks, including disruptions to education, training, employment and income losses, and now experience greater difficulties in finding good-quality jobs. Females are facing an increasing burden to manage both paid work and unpaid care and household work. Vulnerable and marginalized youth confront additional hardships in accessing learning and decent work opportunities. Youth unemployment is likely to increase, affecting youth employment in sectors that are hard hit. The impact of COVID-19 on youth skills development is apparent: 210 high school students have dropped out of school. Another challenge is lack of alternative learning: both the lack of alternative learning platforms for students with disabilities and those who may not be able to effectively cope with remote learning modes, including students from the lower-income strata, and the lack of alternative learning for TVET students and skills development related to digital technologies available to the youth sector. Most young people lack skills and do not have access to suitable learning and training opportunities.

The Economic Contingency Plan – Series 1 initiated the Build Bhutan Project to bridge the workforce gap in the construction sector and enhance tourism resilience while engaging laid-off employees, the unemployed, and youth who have returned from abroad for employment in prospective sectors. A total of 6,702 youths has been identified for skilling and reskilling at the NC2 level certification. Of this number, an estimated 855 youths will pursue and move up to NC3 level. The remaining number (80 percent) of the youth will be engaged, and their skills enhanced through on-the-job training.

The MoLHR has also initiated the Youth Engagement and Livelihood Programme (YELP), Critical Skills Training (CST), entrepreneurship development programmes and online learning as part of its workforce recovery initiative to support jobseekers, those unemployed due to COVID-19 and youth who have returned from abroad in their transition to work.\textsuperscript{44} UNDP and Respect, Educate, Nurture and Empower Women (RENEW) have launched a livelihood project designed to improve the well-being of vulnerable women affected by the pandemic. It aims to provide vocational training, cross-cutting job skills, leadership skills, training on basic financial literacy, entrepreneurial skills, and essential rights and awareness-building training. The Loden Foundation in partnership with UNDP Bhutan has initiated the COVID-19 Response Fund to help single mothers and youths affected by COVID-19.

2.4 Skills gaps: current and future shortages in priority sectors

2.4.1 Shortage of skills in three priority sectors

The MoLHR published in the NWP 2016–2022, based on the employer survey 2014, a list of “scarce and critical skills”, for three key sectors: construction, tourism and production.

\textsuperscript{44} Economic Contingency Plan – Series I, Government of Bhutan 2020.

\textsuperscript{45} Announcement, Department of Employment and Human Resources, MoLHR.
These sectors are considered three of the five “jewels” and promising priority areas that have exhibited a great deal of expansion opportunities. Table 2.1 summarizes the findings of an analysis of skills shortages in the priority sectors. To identify occupational categories for these sectors, this section adopts the International Standard Classification of Occupations (ISCO) major, sub-major and minor groups.

**Table 2.1: Skills shortages in three priority sectors**

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Construction – Roads, buildings, bridges, hydropower</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.6</td>
<td>High shortage (critical shortage)</td>
<td>Traditional architects</td>
</tr>
<tr>
<td>3.1.2</td>
<td></td>
<td>Site supervisors</td>
</tr>
<tr>
<td>7.1.2</td>
<td></td>
<td>Plumbers</td>
</tr>
<tr>
<td>7.11</td>
<td></td>
<td>Concrete workers</td>
</tr>
<tr>
<td>3.1.1</td>
<td>Shortage (hard-to-fill)</td>
<td>Civil engineering technicians</td>
</tr>
<tr>
<td>8.3.3</td>
<td></td>
<td>Civil engineering equipment operators and drivers</td>
</tr>
<tr>
<td>7.2.1</td>
<td></td>
<td>Welders</td>
</tr>
<tr>
<td>7.11</td>
<td></td>
<td>Masons and carpenters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Tourism, hospitality and hotels</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4.3</td>
<td>High shortage (critical shortage)</td>
<td>Chefs</td>
</tr>
<tr>
<td>5.1.3</td>
<td></td>
<td>Food and beverage</td>
</tr>
<tr>
<td>5.1.1</td>
<td>Shortage (hard-to-fill)</td>
<td>Language guides</td>
</tr>
<tr>
<td>1.41</td>
<td></td>
<td>Hotel and Restaurant Managers</td>
</tr>
<tr>
<td>2.4.3</td>
<td></td>
<td>Marketing, reservation and ticket officers</td>
</tr>
<tr>
<td>5.1.5</td>
<td></td>
<td>Housekeeping</td>
</tr>
<tr>
<td>4.2.1</td>
<td></td>
<td>Customer care officers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Production</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5.1</td>
<td>High shortage (critical shortage)</td>
<td>Food processors</td>
</tr>
<tr>
<td>3.11</td>
<td></td>
<td>Mining engineering technicians</td>
</tr>
<tr>
<td>7.5.1</td>
<td></td>
<td>Product designers</td>
</tr>
<tr>
<td>2.1.4</td>
<td></td>
<td>Chemical engineering technicians</td>
</tr>
<tr>
<td>7.2.1</td>
<td></td>
<td>Fabricators</td>
</tr>
<tr>
<td>8.1.6</td>
<td></td>
<td>Plant and machine operators</td>
</tr>
<tr>
<td>7.11</td>
<td>Shortage (hard-to-fill)</td>
<td>Carpenters</td>
</tr>
<tr>
<td>2.6.5</td>
<td></td>
<td>Craft artisans</td>
</tr>
<tr>
<td>1.3.1</td>
<td></td>
<td>Managers</td>
</tr>
<tr>
<td>2.4.3</td>
<td></td>
<td>Marketing officers</td>
</tr>
</tbody>
</table>

Source: ISCO-08, Volume 1, ILO and National Workforce Plan 2016–2022, MoLHR.

Accommodation, food services and tour operators’ businesses predominate the tourism sector. Manufacturing, wholesale and retail trade account for most of the production sector, where export-oriented manufacturing sources foreign worker. The results illustrated in Table 2-2 show the share of firms facing skills shortages and points to a general recognition that a skilled workforce is a fundamental condition for business success. However, there is some variability to the levels of difficulty of firms to source these necessary skills. The production sector finds it more difficult than others to recruit Bhutanese workers with the required skills: 48.2 percent indicating that this is hard, compared to 28.7 percent for construction, and 26.7
percent in tourism. However, there is some variability in the production sector. This difference may be an indication that the production sector needs to meet high-quality standards in the export-oriented manufacturing business to be successful in the long-term, while tourism recruits a higher proportion of lower-level occupations.

Table 2.2: Recruitment challenges

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Construction (%)</th>
<th>Tourism (%)</th>
<th>Production (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills not available in Bhutan</td>
<td>28.7%</td>
<td>26.7%</td>
<td>48.2%</td>
</tr>
<tr>
<td>Skills not available in the business location</td>
<td>18.9%</td>
<td>14.7%</td>
<td>25.4%</td>
</tr>
<tr>
<td>High demand for skills in Bhutan</td>
<td>24.6%</td>
<td>17.1%</td>
<td>12%</td>
</tr>
<tr>
<td>Lack of resources/business not doing well</td>
<td>6%</td>
<td>13.2%</td>
<td>5.1%</td>
</tr>
<tr>
<td>In the process of hiring</td>
<td>16.3%</td>
<td>24.7%</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

Source: National Workforce Plan 2016–2022, MoLHR.

Table 2.3 provides a perceived indication of skills shortages by qualification levels. It shows that it is more difficult to recruit Bhutanese workers with higher education levels and reflects the mismatch between education received and that which is relevant to businesses. As a result, they perceived it important to recruit those with lower-level qualifications. Bhutan has a low proportion of managers, professionals and technicians with post-graduate qualifications in the private sector. Generally, a higher and qualified person is expected to be more productive, as they are able to multitask and carry out different roles.

Table 2.3: Share of firms in each sector that consider it important to recruit candidates with this educational qualification

<table>
<thead>
<tr>
<th>Very important to recruit with relevant qualification</th>
<th>Construction (%)</th>
<th>Tourism (%)</th>
<th>Production (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s (post-graduate)</td>
<td>38.4%</td>
<td>29.4%</td>
<td>22.8%</td>
</tr>
<tr>
<td>Bachelor’s Degree</td>
<td>50.1%</td>
<td>25.5%</td>
<td>27.9%</td>
</tr>
<tr>
<td>Vocational and Technical</td>
<td>68.9%</td>
<td>34.5%</td>
<td>42.9%</td>
</tr>
<tr>
<td>Secondary School</td>
<td>49.9%</td>
<td>46.8%</td>
<td>41.4%</td>
</tr>
</tbody>
</table>

Source: National Workforce Plan 2016–2022, MoLHR.

Table 2.4 shows the total number of foreign workers engaged in various sectors in 2019 as per the ISCO. Most workers were engaged in “Craft and Related Trade” or as “Technical and Associated Professionals” and “Plant and Machine Operators and Assemblers”. The composition of foreign workers reflects important indicators of skills shortages and gaps in the labour market. Foreign workers also occupy a broad range of other management roles including in human resources (HR), finance, operations and housekeeping.
Table 2.5 shows the level of relative importance of skills and competencies for new recruitment. A majority agreed that communication skills and customer relationships are the main soft skills sought after for new recruitment. A very high proportion believed that workers’ attitudes, loyalty and commitment are core characteristics required for new recruitment.

Table 2.5: Skills and competencies considered important for recruitment

<table>
<thead>
<tr>
<th>Very Important</th>
<th>Construction (%)</th>
<th>Tourism (%)</th>
<th>Production (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication skills</td>
<td>70.9%</td>
<td>85.8%</td>
<td>67.8%</td>
</tr>
<tr>
<td>Writing skills</td>
<td>52.0%</td>
<td>54.8%</td>
<td>44.2%</td>
</tr>
<tr>
<td>Problem-solving</td>
<td>61.9%</td>
<td>63.6%</td>
<td>52.6%</td>
</tr>
<tr>
<td>Analytical thinking</td>
<td>66.2%</td>
<td>61.7%</td>
<td>57.7%</td>
</tr>
<tr>
<td>Customer relationship skills</td>
<td>80.3%</td>
<td>86.4%</td>
<td>79.5%</td>
</tr>
<tr>
<td>Creativity</td>
<td>72.8%</td>
<td>64.3%</td>
<td>71.7%</td>
</tr>
</tbody>
</table>

Source: ISCO-08, Volume-1, ILO and Annual Report 2018–2019, MoLHR.

There is significant demand to improve the technical and basic skills gaps among members of the workforce, while looking for new recruitment from the Bhutanese youth workforce.

2.4.2 Occupational forecast for six priority sectors

A total of 4,939 employers were surveyed in 2017 representing six priority sectors: construction, tourism, production, education and training, ICT, and the services sector. Employment forecast shows job prospects scenarios for the three priority sectors: construction, tourism and production. The occupational forecast for the 12th FYP 2018–2023 is summarized in Figure 2.1.
The most jobs are seen in the services sector (45.9 percent), followed by production (14.7 percent), tourism (14.5 percent) and construction (11.6 percent). As shown in Table 2.6, the highest number of jobs by major occupation is in “Services and Sales” (28.4 percent) followed by “Crafts and Related Trade” (20.1 percent).

The value chain and Internet-based development will increase the demand for skilled workers. The supply chain and brand-awareness building can eventually expand into the exports market, further raising demand for higher skills. Those sectors engaged in higher productivity levels for exports will bring greater demand for high-skilled workers and consequently, higher demand for STEM-type and ICT skills. The construction sector will continue to put pressure on demand for hard skills: heavy machinery operators, welders, masons, plumbers and concrete workers.

Similarly, tourism now requires more skills and reskilling. This is more challenging with the diversification of products in the area of ecotourism and cultural tourism, bringing demand for higher skills in culture and leisure activities.
The production sector will see more automation to cope with higher quality standards, competition and the demands of the exports market, leading to a higher-skilled workforce. Digitization will bring greater demand for software programmers to design web and mobile applications to support new businesses. Further, with the expansion to a larger customer base through improved linkages with external markets, established exchanges between local and international firms will create a higher demand for medium- and high-skilled workers.

## 2.5 Skills gaps in exporting companies

### 2.5.1 Skills gaps and competency for exporting companies

As discussed in the previous section, firms engaged in the exports market will require both medium- and high-skilled workers. As Table 2.7 shows, the key skills essential to the success of the exports market have been identified as strategic export business planning, global partnership management, marketing skills, export sales and channel management, professional sales skills, design and innovation skills, foreign languages, and cultural awareness and communication skills. Companies anticipate difficulties over the next two to three years sourcing accountants and international finance, ICT and software, and marketing staff who are computing science professionals. The shortage of accountants is common in all exporting companies. Managers remain weak in strategic thinking and lack knowledge about law, finance and new technologies.

### Table 2.7: Skills gap and competency for exporter companies

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Skills and Competencies</th>
<th>Current</th>
<th>Future (2 to 3 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Management Skills</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>1.2.1</td>
<td>Strategic Export Business Planning</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>1.2.1</td>
<td>Global Partnership Management</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>1.2.1</td>
<td>Project Management</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Financial Risk Management</td>
<td>HS</td>
<td>HS</td>
</tr>
<tr>
<td>2.4.3</td>
<td>International Marketing Skills</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Key Account Management</td>
<td>HS</td>
<td>HS</td>
</tr>
<tr>
<td>2.4.3</td>
<td>International Sales Skills</td>
<td>A</td>
<td>S</td>
</tr>
<tr>
<td>1.2.2</td>
<td>Design &amp; Innovation Skills–Linking customer needs research to the design of new products and services</td>
<td>S</td>
<td>HS</td>
</tr>
<tr>
<td>2.6.4</td>
<td>Foreign Languages and Cultural Awareness</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Technical Skills</td>
<td>S</td>
<td>HS</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Software Development Skills</td>
<td>S</td>
<td>HS</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Soft Skills: Interpersonal Skills, Emotional Intelligence, Problem Solving, Analytical and Communication Skills</td>
<td>S</td>
<td>HS</td>
</tr>
</tbody>
</table>

Legend: Skills shortage (S), high shortage (HS) and availability (A).

Source: ISCO-08, Volume-1, ILO and Annual Report 2018–2019, MoLHR.
2.6 Skills gaps in cottage and small industry

2.6.1 CSI potential and barriers

The technology used by CSI in Bhutan is not at par with international trends in all sectors. This is a significant risk factor for CSIs. An overview of key success and risk factors is summarized in Table 2.8.

Table 2.8: Key success factors and risk factors for CSIs

<table>
<thead>
<tr>
<th>Key success factors</th>
<th>Key risk factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward and backward linkages are established through the cold chain, strong distribution network, application of modern technology, product innovation, economics of scale, developing high-value agro-based products and strong brands and quality.</td>
<td>Untapped agricultural products and wastage of products due to poor supply chain and cold chain linkages.</td>
</tr>
<tr>
<td>Demonstrated capacity to tap export growth in the high-value segment; improving packaging and competitive pricing.</td>
<td>Low productivity and lacking scale, poor performance of the agricultural/primary sector, low quality, insufficient hygiene and international trade rules in the exports market.</td>
</tr>
</tbody>
</table>

Source: By author based on sector analysis and observation from the field visit.

2.6.2 CSI skills gaps

The Startup and Cottage & Small Industry Development Flagship Program Blueprint 2019–2023 identified skilled labour shortage as a factor hindering the increase of productivity. Labour shortage results primarily from a mismatch of skills between CSI’s demand and labour market supply. According to the Employer Survey 2017, skills shortage, access to finance, access to market, labour turnover, and business competition are some of the highest priorities for firms among the top 14 barriers to business growth. The most affected were the services, tourism, production and craft sectors. The occupational categories required in the CSIs include “Managers”, “Plant and Machine Operators” and “Technicians”. As shown in Figure 2.2, a large proportion of the workforce falls in the lower portion of the skills pyramid, while higher skills training is required for Levels 1 and 2.

Figure 2.2: Skills pyramid for CSIs

Source: Derived from the classification of managerial skills pyramid.
As shown in Table 2.9, the three most important occupations in CSIs are: managers, supervisors and operators. This is attributed to the fact that most CSIs are in the early stages of their operations.

**Table 2.9: Three most important skills gaps in CSIs**

<table>
<thead>
<tr>
<th>ISCO-08</th>
<th>Level</th>
<th>Skills gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2.1</td>
<td>Manager level</td>
<td>Lack of strategic planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of sound business operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of team management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of resource management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of negotiation skills</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Supervisory level</td>
<td>Lack of knowledge of the standards and hygiene</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of quality processes and regulatory compliance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of team management skills and value chain</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Poor technical knowledge – new machines and ICT skills</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Operator level</td>
<td>Lack of understanding of the importance of safety issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of technical expertise without formal machine operation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of technical, operational skills, raw material and machine parameters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of know-how to find faults in products</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of quality control/assurance</td>
</tr>
</tbody>
</table>

Source: By author based on sector analysis and observation from a Start-up Centre in Thimphu – Yiga Chocolate Production.

### 2.6.3 Possible focus areas for skills building for CSIs

A wide range of skills development activities would arise from the need to build skills at the lower levels, for example, for operators, workers, packaging and assembly line workers related to trade sector areas. Generic skills are also crucial in the following areas: packaging, labelling, working in hygienic conditions, operation of processing equipment, good manufacturing practices, compliance to quality and safety, machinery operation, regulatory compliance, basic maintenance of equipment, sales, e-commerce, marketing and sales. Soft skills are also needed: communications, customer relationships and basic behavioural skills. Figure 2.3 shows the perceived action required for skills development in CSIs. Establishing a common Quality Control (QC)/Quality Assurance (QA) person and testing laboratory is crucial for CSIs.

**Figure 2.3: Possible actions that can be taken by stakeholders for CSIs**

Source: By author based on sector analysis and observation from a Start-up Centre in Thimphu – Yiga Chocolate Production.
2.7 Skills gaps in youth

2.7.1 Youth and 21st Century skills

The Foreign Direct Investment Policy (FDIP) 2019 allows FDI in selected small-scale production and manufacturing sectors to foster new technology and skills and enhance market access. Investments in the diversification of the economy for exports and import substitution will stimulate the demand for more skilled workers that require within-firm skills upgrading and firm-specific skills. However, sustaining the growth of Bhutan’s economy will become increasingly difficult unless significant investments are made to prepare youth for 21st century jobs.

In 2019, only 47 percent of youth have the skills required for 21st century jobs, according to a United Nations Business Coalition for Education (UNBCE) study. Current efforts to address the skills gaps are insufficient. Only 81 percent of youth will have the basic workforce skills required by 2030.46

The Fourth Industrial Revolution is bringing emerging technologies to the forefront at a rapid pace that will require new skills enhancement to develop a more productive youth sector in (i) basic skills literacy, numeracy and digital knowledge, (ii) soft-skills collaboration, teamwork, respect, interpersonal communications, personal responsibility and work-readiness, and (iii) technical skills. For the skilled jobs that do exist, firms often import skilled labour, revealing a gap between the skills needed and the skills that youth have when they enter the labour force. More efforts are needed to build STEM and ICT skills for youth.

2.7.2 Skills gaps in the tourism industry

Until recently, there were no training providers offering courses in tourism. This has resulted in skills shortages in a key area of the country’s lucrative sector. Chapter 8 identifies the skills gaps and shortages in the tourism sector. The shortage is more acute for professional guides for trekking and mountaineering, Gross National Happiness (GNH) philosophers and historians, and guides on birding, flora and fauna.

Similarly, in the hospitality sectors, youth do not have considerable experience at the executive levels or as chefs, financial controllers, maintenance and general managers, and trekking cooks. Given the paucity of more recent data, the skills gap is evident from the broad range of courses offered by the Royal Institute for Tourism and Hospitality (RITH) that provide diploma courses in Hotel and Tourism Management. Greater effort is required to address the current and future skills demand providing diverse courses, particularly targeting key skill levels and occupational areas.

2.8 Women’s empowerment and skills

2.8.1 Skills and gender equality

Currently, the female workforce faces limited access to skills training opportunities. In 2019, more than 11.9 percent of the female workforce had a primary level of education and only 3.5 percent of them were undergraduates.47 They are the lower share in the number of total employed persons (46.9 percent) compared to men (53.1 percent). Close to 29 percent of workers are classified as informally employed, the majority of which are women in rural areas.48 They often choose higher studies that are less in demand in the labour market.

46 Global Business Coalition for Education’s Skill Scorecard (GBC-Education), Education Commission and UNICEF.
47 Labour Force Survey 2019, NSB.
48 Ibid.
are mostly engaged in agriculture and retail/wholesale businesses that require lower skills and lower-income generation prospects with the majority “employed” as a family worker. The Establishment Survey Report 2017 shows that women employees by major occupation and education were found to be very low with 33.2 percent compared to men at 66.8 percent in the 12th FYP. The inactivity rate is also low (38.8 percent) compared to men (28.2 percent). The share of young women in unemployment was 3.3 percent compared to their male counterparts, 2.2 percent, in 2019.\footnote{ibid.}

Women were found to lack enterprise development skills, technical skills, digital literacy and soft skills. In the current entrepreneurship ecosystem, about 40.1 percent of businesswomen have a lower level of formal education.\footnote{Challenges Facing Micro and Small Businesses Owned and Operated by Women in Bhutan, NSB.} The training institutions providing training courses must offer effective training which is objective driven and geared towards a nationally recognized qualification system, i.e. Quality Assurance Framework (QAF).

2.8.2 The digital skills gender gap and the labour market

The information age has disproportionately affected women. The disparity in skills access for women in technology is both a cause and consequence of already existing gender inequalities. According to the GSMA report “Mobile Internet Connectivity 2019 for South Asia” for Bangladesh, Bhutan, India, Nepal and Sri Lanka, mobile Internet adoption is not equitable, with women 58 percent less likely than men to use mobile Internet and rural populations 45 percent less likely to use mobile Internet than urban populations.\footnote{Mobile Internet Connectivity 2019 South Asia Factsheet (website).} The two biggest barriers to mobile Internet adoption are lack of digital skills followed by a lack of literacy for women.

The stereotype of technology as a male-dominated domain is pervasive in many contexts and appears to affect girls’ confidence in digital skills from a young age. The majority of students taking advanced-level STEM courses are boys. Girls tend to opt out of STEM subjects earlier in secondary school than boys and they are increasingly less likely to pursue STEM studies as they move through secondary and into higher education. The share of tertiary STEM degree holders among females is still low (30.6 percent) compared to 69.4 percent for males.\footnote{Annual Report 2018–2019, RUB.} In many cases, the gender gap that appears during secondary school becomes even more pronounced at the tertiary level. Women constitute less than one third of student enrolment in higher education ICT studies. The share of women’s enrolment in ICT courses was 31.7 percent compared to men’s 68.3 percent of total enrolment in the Gyalposhing College of Information and Technology (GCIT) in 2020.\footnote{GCIT enrolment statistics, 2020.} The share of female enrolment in TVET was 32.3 percent compared to male enrolment at 67.7 percent in 2019.\footnote{TVET Tracer Study 2019, MoLHR.}

The gap between male and female university graduates is translated into the labour market. Women who work in the digital sector are less likely to hold high-level positions than their male counterparts. The RGoB can make ICT a core requirement of formal education and creating hubs where women can safely access and learn about new technologies in basic functional, generic and higher-level skills that facilitate the use of digital technologies in empowering and transformative ways. Disparities in representation, promotion and compensation make retaining women in the digital sector a challenge. This is more critical in export promotion and the growth of an inward FDI ecosystem in the country.
2.9 Policy response of the RGoB

Building on the analysis in the preceding sections, this section details the RGoB’s policy response and proposes a range of policy options from the supply side to enhance skills development system in Bhutan.

2.9.1 Education and training

The Ministry of Education (MoE) implemented the Bhutan Education Blueprint (BEB) 2014–2024 for the development of the education sector. Despite this effort, Bhutan’s education sector is failing to equip youth with the skills most relevant for jobs. Very few come out of the education system equipped with the technical and business skills and entrepreneurial knowledge sought after in the labour market. The BEB’s main objectives aimed to improve quality education and to strengthen teacher training, with a strong focus on building linkages between education and TVET and the labour market.

The BEB 2014–2024 includes eight strategic shifts:
- Shift 1: Ensure access and equity to education
- Shift 2: Revamp curriculum and assessment to enhance student learning
- Shift 3: Raise learning outcomes of students comparable to leading international standards
- Shift 4: Transform teaching into a profession of choice
- Shift 5: Ensuring high-performing schools and school leaders
- Shift 6: Leverage ICT for learning
- Shift 7: Enhance values and well-being in education
- Shift 8: System transformation, delivery capabilities and capacity.

2.9.2 Technical and Vocational Education Training

The government accorded high priority to transform Technical and Vocational Education Training (TVET) into an attractive learning and career pathway for youth. The TVET Blueprint 2016–2026 outlines a four-pillar strategy that includes expansion of TVET provision; quality improvement; relevance to market needs; and strengthened governance and development to address systemic problems. The main aims are:
- Increase intake and enrolment in TVET from 6.9 percent in 2016 to 20 percent by 2024. This seeks to address the need for a better-skilled workforce and to create a youth talent pool.
- Upgrade training levels to a diploma course, as the existing programme is limited to semi-skilled to master craftsmen, to help enhance the value chain in the firm and services sectors and enable capable youth to take up well-paid jobs currently occupied by expatriates.
- Promote lifelong learning and diversify courses to address the needs of industries, linking with the private sector and business community.
- TVET sets the ground for the implementation of reforms to address the four key bottlenecks: inadequate capacity; poor quality; low market relevance; and weak policy and institutional capacity, poor image and lack of financial support. Each of these pillars has several specific strategies:
  - Pillar I: Expand TVET provision through: (i) expansion of capacity to meet future needs, (ii) facilitation of the expansion of private TVET providers; (iv) improvement of resource utilization; (iv) promotion of equity enrolments; and (v) provision of support to promote positive images of TVET.
  - Pillar II: Improve quality through four strategies: (i) training of trainers; (ii) improve the quality of the TVET programme; (iii) identify new and innovative forms of delivery; and (iv) ensure the private sector plays a key role in delivering TVET.
• Pillar III: Improve relevance through four strategies: (i) improve intelligence on skills in demand; (ii) align the TVET programme to the needs of the labour market; (iii) ensure that youth develop skills that make them more employable; and (iv) improve skills levels for sustainable livelihoods.

• Pillar IV: Strengthen management systems through four strategies: (i) setting up coherent and strategic information systems; (ii) strengthening management and coordination; (iii) ensuring the private sector plays a key role in delivering TVET; and (iv) moving towards a performance-based policy system.

The TVET programme was piloted in seven schools as an optional subject in Class IX, developed curriculum and clubs, and a pre-vocational orientation programme was conducted in schools. Bhutan Innovation and Technical Education (BITE) is currently in the process of studying the reforms and it may be too early to comment on the proposed reforms.

2.9.3 National workforce training

The National Workforce Plan (NWP) 2016–2022 was adopted to provide an overarching framework for workforce development strategies through synergy between TVET and education to address the skills gap. It outlines nine strategies that will align the needs and priorities and close the existing skills gap:

• Strategy 1: Higher investment and priority in skilling
• Strategy 2: Position tertiary education institutions to be relevant to the long-term workforce
• Strategy 3: Complement education and training with employability skills
• Strategy 4: Provide a greater focus on entrepreneurship effort
• Strategy 5: Collective effort in improving job and workplace
• Strategy 6: Strengthen HR development support for the economic sectors
• Strategy 7: Expatriate workers’ approach
• Strategy 8: Improve the workforce planning process
• Strategy 9: Develop a sustainable fund for skilling efforts.

No mid-term review has been carried out. However, the recommendations have been integrated into the 12th FYP and the 12th Human Resources Development Master Plan 2018–2023 to provide critical skills training to youth and women.

2.9.4 STEM education

The National Education Policy (NEP) 2019 aims to enhance access, quality and equity in education towards preparing and nurturing citizens with values, skills and knowledge for the 21st century aligned with the country’s unique values, traditions, culture and aspirations. As part of its effort to strengthen the quality and relevance of the curriculum, the MoE is seeking to strengthen STEM subjects to promote creativity and innovation in schools. The Royal University of Bhutan, based on the Strategic Plan 2018–2030, is working to increase the qualifications of lecturers at the Master’s and PhD levels in STEM courses.

2.9.5 Entrepreneurship and innovation

Based on the National Entrepreneurship Strategy (NES) 2015, the MoLHR established a Business Start-up Centre in Thimphu and conducted various programmes—Start-up Innovation Tech Week and Start-up Weekend; the Start-up Acceleration Programme; the Organized Business Idea Competition; Digital Fabrication Laboratories; Training of Trainers on New Business Creation; Training on Micro-works and online freelancing.
2.9.6 ICT and digital economy education and skills

The education system is trying to ensure equitable, inclusive and high-quality digital skills education and training. These efforts carry special urgency because digital skills open pathways to further learning and skills development. The iSherig-2, Education ICT Master Plan 2019–2023 outlines specific programmes to improve the quality of education and skills available in the labour market.

The MoE launched the Education ICT Flagship Programme in the 12th FYP so graduates will enter the labour market with adequate foundational ICT skills. In line with iSherig-I 2014–2018, an ICT literacy curriculum on four components—technology operation and concepts, communication and collaboration, digital citizenship, and computational thinking—has been offered to Classes IV and above since 2017. The Gyalposhing College of Information and Technology was introduced at the tertiary education level.

In a fast-changing ICT field, curricula need to be updated on a short cycle to incorporate new developments and continue to meet the evolving needs of firms. ICT is the way of the future and youth and training providers should prepare the next generation for a digital future. Similarly, capacity-building opportunities offered through digital platforms, such as online learning, are widely available and access to these should be facilitated in order to promote digital and entrepreneurial skills which will be valuable in the post-COVID recovery.

2.9.7 Skills for women’s and youth empowerment

Both government and non-governmental agencies provide life skills programmes and short-term training in the vocational trades and entrepreneurship. For instance, the Youth Development Fund (YDF) is vigorously promoting skills development for women through training establishments like the Nazhoen Pelri Souvenir Centre, holistic community development projects like My Gakidh Village, ICT literacy, and livelihood skills development. The MoLHR has initiated specific training and skills development activities for youth, such as the Student Business Seedling programme, and has linked skills training programmes with job placement. In collaboration with other agencies, the Ministry provides training and capacity-building in leadership, communication and life skills; tailored support for youth entrepreneurs and out-of-school youth, and gender-awareness courses in colleges, TVET and schools.

2.10 Recommendations

The RGoB has been making noteworthy efforts towards improving access to education and skills development. Despite these efforts, there is an urgent need to improve the quality and relevance of both education and training. Based on the above findings, the following are recommended:

2.10.1 Bridging the gap through curricula involvement and investment in training

Educational institutions increasingly recognize the value of recruiting professionals as guest lecturers to increase students’ awareness of real-life work issues. Learning under these initiatives involves analysing and reflecting on experiences in both the classroom and the workplace. Educational institutions can link with firms in the early stages of curriculum development. Involvement of firms at this early stage will help address the issue of skills mismatch between the firms and educational institutions. Inclusion of creative industry courses in TVET and establishing a sector skills council should be implemented. Training programmes designed specifically for women should be implemented to provide them with better choices.
to work in the trade sector through teaching and learning processes. Both pre- and in-service teacher training must provide gender-sensitive pedagogies to address the different needs of women.

### 2.10.2 Establish skills partnerships in industrial zones/clusters with post-secondary institutions

Partnerships between educational institutions and the private sector should be initiated to set up special training programmes in industrial zones. The new Economic Processing Zone demonstrates the potential for better job creation and contributing a substantial share of exports. This shows the opportunity for institutions to play a unique role as skills provision partners to help fill the skills gap in the zone.

The Employment Responsibility Committee could advocate for its implementation, including establishing STEM-type skills and ICT services clusters. The Business Startup Center (BSC) should be equipped with the necessary training resources designed together with the business community. Laws related to training requirements for a specific sector should be simplified and designed in collaboration with firms and the private sector. This should begin with a simplified website for skills development with prominent links to the BSC, employment services and institutions.

### 2.10.3 Financing instruments for CSI training for youth

Deferred and income-contingent loans could be developed for youth or CSIs. Under the scheme, only a small portion of the training costs are paid when the training is provided. The rest is repaid later, with the first financial returns of the training decision, such as is done in the Learn Now, Pay Later Programme in India.

Similar to Jab-chor initiated by the Royal Monetary Authority (RMA), equity financing from CSIs to provide short-term tailor-made training can build specific skills within the industry. A shared equity approach could be adopted with equity investors funding a pool of CSIs mutualized into a common fund. This could serve as a basis for the cluster collaboration type for CSIs.

Another option could be to stimulate youth’s ownership of their employment and training opportunities. This could better target youth and offer more sustainable employment opportunities. The MoLHR can channel grants through young people’s direct equity participation in the CSIs, hiring and training them. CSIs will receive direct funding when they hire or train them. In return, youth will have a direct share in the CSIs employing them. There must be an instrument to promote young entrepreneurs’ access to finance and tailor-made support services. The MoLHR can invest in educational institutions supporting youth entrepreneur programmes. CSI banks could also develop a specific instrument within its “risky” portfolio to stimulate and finance business innovation.

### 2.10.4 Quality assurance of training providers

Ensuring quality assurance of providers and trainers will help firms choose good training providers. Ways to help address the challenges of bringing more quality training programmes include a formal accreditation of training providers, a quality label for trainers, and a transparent system of assessment or rating via an online nationwide directory of training providers.
2.10.5 Training for women and youth entrepreneurial skills and knowledge

Women’s participation in training courses that are traditionally male-dominated, such as technical, ICT and mobile repair services, should be pursued including market and support services to women for accessing cross-border markets. Women entrepreneurship training coupled with awareness and behavioural change training will help empower them and to establish self-employment businesses. Organizing internships with learning outcomes for youth must be provided with the possibility of spending time in a real business environment to put their theoretical knowledge to a test and gain additional practical knowledge and skills. At higher education levels, certain credits can be awarded to motivate youth. Organizing national competitions in the field of entrepreneurship on the occasion of Global Entrepreneurship Week (GEW) can provide motivation to young people. The best schools, the most active teachers and youth should be rewarded. Providing small grants focusing on a youth-led entrepreneurship programme can open a new road for active participation of young people in business innovation.

2.10.6 Academy of Construction courses in Jigme Namgyel Engineering College

Introducing the “Academy of Construction” in the Jigme Namgyel Engineering College (JNEC) with new short courses for young people specializing in construction can address current and future skills demand. The courses must focus on technical and general trade-related skills and gender-specific courses. The courses should include modular construction that can provide a high-quality learning environment. Further, the courses must focus on targeting key skill levels and occupational areas for future leading economic sectors supported by evidence-based studies. This will achieve the objective of the Build Bhutan Project (BBP). The process of mechanization in the construction and production sectors is very slow. It becomes objectively necessary for JNEC to update infrastructure to use the latest technology, machineries and innovation so that the trainees are equipped with the latest technology. The result will encourage almost every sector to mechanize and ultimately encourage youth employment.

2.10.7 Prioritizing digital skills

The COVID-19 pandemic has disrupted livelihoods for many young people. Education and training opportunities for youth have also been interrupted, creating long-term implications for post-COVID recovery. It is important to prioritize the digital technologies that can mitigate the effects of the crisis on youth. Digital platforms are enabling youths to pursue online learning, entrepreneurs to engage in e-commerce, and workers to earn income through online freelancing and micro work. These remote opportunities are particularly beneficial for young women and other vulnerable youth who have been disproportionately affected by the crisis. The RGoB and businesses must now increase their investments in digital skills development to ensure that youth can leverage online education and employment opportunities. To succeed on a large scale, digital skills training programmes must collaborate with stakeholders across a variety of sectors. The RGoB must work with private sector partners to empower youth with the skills they need to thrive during and after the COVID-19 pandemic.
Box 2.3: Support of the area/sector to reach the indicators of the 21st Century Economic Roadmap

The areas of support for achieving the 21st Century Economic Roadmap are envisaged from the idea, “Inclusive Development and Democratization”, to fully appreciate the private sector as the engine of economic growth:

a. Draft guideline to establish a dialogue with policymakers to allow the private sector to engage in the formulation of the FYP so that avenues are created for investments in skill training.

b. Build a strong public–private partnership to stimulate investments in skill development, especially in the services sector, which serves as an important input for other sectors.

c. Engage the private sector in the evaluation of public sector performance and implementation of key economic policies in the field of economic development strategy.

d. Establish STEM and ICT services clusters to support other industries via spillovers of technology and productivity

e. Make clear priorities for action on the digital roadmap on ICT skills for youth and women.

f. The proliferation of digital technology and digital services has made digital skills a prerequisite for full participation in society. This is important for post-COVID-19 priority programmes for youth.
References


3.1 Introduction

3.1.1 Rationale

Trade facilitation combined with efficient logistics and transport is a crucial step in promoting Bhutan’s international trade. This is even more so for a landlocked country like Bhutan, where trading costs are high compared to other countries with direct seaport linkages. The country shares borders with China and India. The lack of territorial access and distance from the sea, with the nearest seaport 750 kilometres away in Kolkata, India, are fundamental constraints to Bhutan’s trade development and its logistics ability to move goods across borders quickly and more cost-effectively.

The Royal Government of Bhutan (RGoB) recognizes trade and trade facilitation measures as integral components of the country’s path towards economic growth and employment generation. This includes trade facilitation plans and programmes implemented through Bhutan’s Five Year Plans (FYPs). To this end, measures directed at improving trade facilitation, logistics and transport will have a direct impact on the country’s competitiveness.

Bhutan, as an observer to the World Trade Organization (WTO), has been actively engaged in issues pertaining to the WTO Trade Facilitation Agreement (TFA). Membership to the WTO will be beneficial to the country in the long run and acceding to the TFA will be important if and when Bhutan becomes a WTO Member, as India, Bhutan’s main transit country, has already acceded to the WTO TFA on 22 April 2016.

Logistics and transport as a derived demand of international trade will need to improve to support the expected increase in trade from WTO membership. Bhutan is a member of the Revised Kyoto Convention (RKC), also known as the International Convention on the Simplification and Harmonization of Customs Procedures (as amended). This means that the country has already aligned its customs legislation with the RKC and this will help improve trade facilitation measures in the country.

The purpose of this chapter is to first review the progress made in the implementation of Bhutan’s Diagnostic Trade Integration Study (DTIS) 2012 chapter on trade facilitation, transport and logistics. The chapter will summarize current issues constraining trade facilitation, logistics and transport and provide some recommendations.

3.2 Trade facilitation

As a landlocked least-developed country (LDC), Bhutan is faced with daunting challenges, as its costs to trade are increased due to higher transportation costs related to transit entry and exit points, as well as the lack of trade facilitation measures and infrastructure support. Reducing its trade costs is essential to effectively use trade as an engine of growth and sustainable development.

As a starting point, it is important to review Bhutan’s DTIS 2012 Action Matrix to provide readers with a baseline of what was recommended and what was achieved over the past eight years. Table 3.1 provides a description of the DTIS 2012 Action Matrix on trade facilitation and logistics issues that was formulated for Bhutan. It can be seen that while much progress has been made, it remains insufficient, and more progress is needed.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Identified measures</th>
<th>Status as of 2020</th>
</tr>
</thead>
</table>
| 4.1 Boost dry port operation and identify bottlenecks in clearance process | Measure clearance time at Phuentsholing border station (customs and other border agencies) using a well-tested methodology such as the WCO Time Release Study (TRS). | • Business Process Analysis (BPA), Time Cost-Distance (TCD) and TRS conducted in 2016 by ADB under SASEC Program with results published in 2017  
• Some recommendations from the above studies have been implemented.  
• Small dry port constructed at Phuentsholing in operations since November 2019 |
| 4.2 Ensure a modern and efficient clearance process based on a fully automated customs clearing system and risk management based on customs control procedures | Automated clearance system Evaluate the potential to optimize the use of the BACS, including lodging of electronic documents, web-based architecture, and linkages with new tax revenue system. Provide advice on development of new version of the BACS, or on sourcing of new software. Prepare capacity-building plan for IT department in line with the upgrades or new solutions. | • Partial implementation  
• eCMS to replace BACS by 2023  
• It will link to other systems within DRC like GST upon its introduction  
• Capacity development plan is part of eCMS |
| Risk Management (RM) technique                                             | Develop action plan  
Design institutional framework, including setting up a risk management unit  
Train staff on risks, risk criteria, and risk management techniques  
Prepare risk management database                                           | • Partial implementation  
• RM will be integrated into eCMS  
• DRC personnel trained in RM under ADB SASEC program  
• A draft guideline on RM developed by DRC but no database or separate institutional framework for RM yet |
| Develop soft infrastructure at border check points                        | Develop Electronic Risk Management module and integrate it into clearance automation software.  
Develop and build warehousing facilities  
Cold storage facilities  
Procure loading and unloading equipment                                    | • Currently 71 private warehouses in Phuentsholing  
• There are RGoB related warehouses like those of FCB, MoH, etc.  
• Mini-Dry Port equipped with 3 warehouses (1 for hazardous goods), 1 cold storage and 4 forklifts  
• FCB has a cold storage in Phuentsholing and Samdrup Jongkhar but not utilized for exports/imports |
| 4.3 Apply the corridor approach to analysis and exploration of alternate route to seaports via Bangladesh and seek bilateral accord with Bangladesh Government | Freight transit corridor analysis  
Corridor performance measurement using established methodology like the UNESCAP corridor measurement tool  
Conduct field surveys                                                       | • Feasibility study on use of inland water way/riverine route for bilateral trade with Bangladesh and transit cargo in 2013  
• Trial export of boulders sent to Bangladesh through riverine route but could not be continued due to a lack of inter-agency agreement in Bangladesh  
• Docking facilities need improvement both in India and Bangladesh sides |
Border-related issues seem to have seen the most progress to support trade facilitation, while there is significant room for improvement in terms of logistics. Transit access via Bangladesh is still difficult, even though it provides an alternative to the main Indian transit freight corridor. The institutional framework to facilitate logistics flows between Bhutan and Bangladesh is almost in place but both governments need to make sure that logistics are really facilitated. The case of Bhutanese boulder exports should serve as a reminder of the challenges ahead and that having an agreement does not mean that implementation will not be problematic.

**Box 3.1: 500 tonnes of Bhutanese stones stuck at Chilmari river port**

Two Bangladeshi vessels carrying 500 tonnes of Bhutanese stones have been stuck at Chilmari river port in Kurigram for more than two weeks as the customs authorities, citing legal constraints, refused to allow the products to enter. The boats arrived at the port on 25 July through the Brahmaputra River, and are supposed to dock at Narayanganj port for unloading. The importers said they followed due procedure in using the waterway. The stones were imported after Bangladesh and Bhutan recently signed a waterway protocol. The first waterway load under the instrument came to Bangladesh through the same route on 18 July. The stones were transported by truck from landlocked Bhutan to Assam, from where the vessels received the cargo and sailed back to Bangladesh.

Importer Nasir Khan said he was informed that Chilmari River Port was not yet authorized to allow imports from a third country like Bhutan. He said they followed all rules before sailing for Assam. The vessels left Chilmari port on 13 July after getting approval from Mizanul Haque, a customs official in Kurigram. Nasir claimed that they also took permission from the Inland Waterways Authority of India (IWAI) and Bangladesh Inland Water Transport Authority (BIWTA). “I opened an LC (letter of credit) for importing the stones, and the customs authorities are aware of everything,” he said. “Why didn’t they tell me anything before?” The market price of the imported stones is Tk 30 lakh, Nasir said. “I’m incurring a loss of Tk 30,000 daily for the delay.”

Aktar Hossen, Second Secretary (Import and Agreement) of Customs in Rangpur, said the goods from third countries like Bhutan can be imported through Burimari (Lalmonirhat) and Banglabandha (Panchagarh) land ports. But the existing law does not permit any import through Chilmari River Port. The river port lacks manpower and infrastructure. The official, however, did not answer when asked why the vessels were allowed to sail for Assam in the first place.
A senior official of the National Board of Revenue (NBR) said no cargo vessel from Bhutan is permitted through Chilmari port. The official said Chilmari port was mentioned in the waterway protocol, but its infrastructure is not ready yet. That’s why this port was not included as a point of entry in a notification NBR issued recently, he said. “The importers brought cargo through this route without prior discussion. Now we have taken an initiative to give special permission for the vessels.” NBR has submitted a proposal to the finance minister for special permission and amendment of the notification, the official said. “We will take necessary measures after getting the approval.”


Domestic logistics issues have also not been addressed as the professionalization of the local logistics industry seems to have failed to attract the attention of the RGoB. There is probably limited understanding related to the role of the local logistics industry in supporting Bhutan’s trade competitiveness.

3.2.1 Current trade facilitation issues

Costs of doing trade in Bhutan are relatively low for both imports and exports compared to other LDCs (Figure 3.1). It should be noted though that Bhutan does not fare well when compared to other nations in the South Asian region (Figure 3.2). The time taken to trade is also recorded to be on the lower side when compared to the averages of other LDCs.

Figure 3.1: Cost and time to export – Bhutan vs other LDCs

Relative to other LDCs, Bhutan’s trade facilitation indicators are not very promising and although it is quite ahead in terms of governance and impartiality, no progress has been made in the areas of automation or advanced ruling. Results of the 2019 UN Global Survey on Digital and Sustainable Trade Facilitation also confirm that the country is lagging behind many Asian economies with regard to trade facilitation. This indicates that significant opportunities exist to improve Bhutan’s trade through trade facilitation, in cooperation with transit countries (Figure 3.3).

Figure 3.3: Digital and sustainable trade facilitation indicators

Source: ESCAP, from UN Global Survey on Digital and Sustainable Trade Facilitation. Available at www.untfsurvey.org.
In this regard, trade facilitation and digitalization have grown in importance, as evidenced by the WTO Trade Facilitation Agreement (TFA), as well as the growing number of regional and subregional initiatives aimed to facilitate electronic exchange of information along international supply chains, including the Framework Agreement on Facilitation of Cross-border Paperless Trade in Asia and the Pacific.\textsuperscript{57} Reduction in trade costs therefore will lead to export promotion, job creation, entry into value chains and export diversification and contribute to the achievement of sustainable and inclusive growth in Bhutan.

Even though some of the objectives of the DTIS 2012 trade facilitation and logistics action matrix have been met, Bhutan still needs to increase its trade efficiency to enhance export competitiveness and market opportunities for small and medium-sized enterprises (SMEs). SMEs still face relatively high transaction costs, mainly due to excessive transport costs and the dependency on transit for access to a seaport. The World Bank Doing Business Survey 2020 ranked Bhutan 89th out of 190 economies overall. In the category of trading across borders, Bhutan was ranked 30th which is a great improvement from the 2012 survey when the country was ranked 168th out of 183 economies.\textsuperscript{58} The country’s ranking was at an all-time high of 28\textsuperscript{th} in the 2018 survey. Table 3.2 provides the details of the results compared with Nepal and India.

Table 3.2: Trading across borders (2020)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Bhutan</th>
<th>Nepal</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to export: Border compliance (hours)</td>
<td>5</td>
<td>11</td>
<td>52</td>
</tr>
<tr>
<td>Cost to export: Border compliance (USD)</td>
<td>59</td>
<td>103</td>
<td>212</td>
</tr>
<tr>
<td>Time to export: Documentary compliance (hours)</td>
<td>9</td>
<td>43</td>
<td>12</td>
</tr>
<tr>
<td>Cost to export: Documentary compliance (USD)</td>
<td>50</td>
<td>110</td>
<td>58</td>
</tr>
<tr>
<td>Time to import: Border compliance (hours)</td>
<td>5</td>
<td>11</td>
<td>65</td>
</tr>
<tr>
<td>Cost to import: Border compliance (USD)</td>
<td>110</td>
<td>190</td>
<td>266</td>
</tr>
<tr>
<td>Time to import: Documentary compliance (hours)</td>
<td>8</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td>Cost to import: Documentary compliance (USD)</td>
<td>50</td>
<td>80</td>
<td>100</td>
</tr>
</tbody>
</table>


The World Bank’s 2018 Logistics Performance Index (LPI) shows that Bhutan ranked 149th out of 160 countries (World Bank, 2018). This is not surprising given its geographic challenges, which severely constrain trade with other countries. What is surprising is that the trading across borders ranking and the LPI ranking are not aligned, highlighting the international logistics challenges of being a landlocked country. The LPI scores are based on a scale of 1 to 5 with 5 being the highest score (Table 3.3).


\textsuperscript{59} See https://unnext.unescap.org/content/un-global-survey-digital-and-sustainable-trade-facilitation-2019
To promote trade and strengthen economic linkages, the Ministry of Economic Affairs (MoEA) and the Ministry of Finance, in consultation with relevant stakeholders, are implementing the following programmes under the 12th Five Year Plan (2018–2023):

• Creation of a more conducive business environment through the combined efforts of the RGoB and private sector such as in the Private Sector Development Committee (PSDC) instituted in the Bhutan Chamber of Commerce and Industry (BCCI) in March 2019.

• Development of trade logistics infrastructure such as dry ports at Pasakha, Gelephu and Nganglam, and warehousing and cold storage facilities.

• Strengthening trade facilitation and automated systems, including development of a national single window (NSW), simplifying administrative procedures and regulatory activities, negotiating mutual recognition agreements and conformity assessments, improving border trade infrastructure, and securing transit rights for the movement of goods.

Trade between Bhutan and India is under the bilateral Agreement on Trade, Commerce, and Transit. The Agreement was originally signed in 1972 and has since been renewed periodically. The latest renewal was signed in November 2016 and came into force on 29 July 2017. It will remain in force for 10 years unless the two countries agree to amend this period on the basis of mutual consent. The Government of India grants Bhutan transit rights through land, air and sea for trading with the rest of the world. The two Indian seaports that are most commonly used for trading with third countries are Kolkata and Haldia.

Bhutan’s other trading partners in the region include Bangladesh and Nepal. Bhutan’s trade with Bangladesh is governed by the Agreement on Trade, which was signed by the two countries in December 2014. Under the Agreement, each country provides preferential tariff treatment for specific commodities. However, several challenges remain despite the two countries’ geographic proximity such as customs clearance at the Bangladesh–India border. According to the baseline study carried out under the Trade and Transport Facilitation Monitoring Mechanism, it generally takes 16 days to import goods from Burimari (Bangladesh) to Thimphu (Bhutan). Bhutan is also a member of the South Asian Association for Regional Cooperation (SAARC), comprised of eight countries, and the Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation (BIMSTEC), composed of seven members.


<table>
<thead>
<tr>
<th>Indicator</th>
<th>Bhutan</th>
<th>Nepal</th>
<th>India</th>
</tr>
</thead>
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<td>Timeliness (out of 5)</td>
<td>2.49</td>
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</table>

Table 3.3: Logistics Performance Index (2018)

It is chaired by the Minister of Economic Affairs and consists of 11 members, 4 from the RGoB and 7 from the private sector.


The member countries Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

The members are Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand.
3.2.2 The WTO Trade Facilitation Agreement

While there is no specific government agency that actively leads trade facilitation policy in Bhutan, the official mandate for trade facilitation policy lies with the Department of Trade (DOT). In 2013, Bhutan strengthened its trade facilitation efforts with the establishment of the National Trade Facilitation Committee (NTFC) under the Department of Revenue and Customs (DRC), Ministry of Finance. The mandate of the NTFC was to bring together, on a single platform, all key government and private agencies involved in addressing legal and regulatory obstacles and bottlenecks in importing and exporting processes and ensuring proper coordination and smooth implementation of trade facilitation activities. In 2015, the NTFC was redeveloped as the National Transport and Trade Facilitation Committee (NTTFC) to address transport-related matters of national interest. NTTFC’s performance has been modest given its placement under the DRC primarily for steering the enactment of The Customs Act of Bhutan 2017 and the customs automation process.

In 2014, the government helped establish the Better Business Council (BBC) to stimulate dialogue and coordination between the public and private sectors for effectively implementing and monitoring laws and policies related to competitiveness, investment and business operations, and for revising policies on licensing and foreign direct investments. As the successor to the BBC, the Bhutan Economic Forum for Innovation Transformation (BEFIT) was established in 2017 as a national platform for dialogue and innovative solutions. BEFIT was reconvened in July 2019 for three days but its future is contingent on the availability of funding. These two initiatives complement the work of the NTTFC to improve the ease of doing business in Bhutan through research, policy analysis and technical backstopping. However, due to the lack of a formal institutional mechanism to incorporate recommendations into policy, their real impacts and benefits have yet to materialize.

3.2.3 UNESCAP Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific

The simplification and digitalization of trade procedures are essential to reducing trade costs for developing economies and enabling them to effectively use trade as an engine of growth and sustainable development. Using the latest estimates from the UNESCAP-World Bank Trade Cost Database, it was found that full implementation of the cross-border paperless trade measures included in the United Nations Global Survey on Trade Facilitation and Paperless Trade Implementation 2017 could help reduce trade costs by more than 25 percent on average across the UNESCAP region, resulting in savings of approximately US$1.2 trillion. Trade cost reductions ranged from 10 percent to more than 40 percent, depending on each country’s current state of implementation of digital trade facilitation measures.

An analysis of paperless trade provisions in existing bilateral and regional trade agreements in Asia and the Pacific also showed that a number of countries have already made commitments to advance paperless trade with this Agreement. It is a useful tool in supporting the implementation of provisions related to paperless cross-border trade. There are benefits for countries to joining this emerging regional agreement, especially trade and transport procedures between Bhutan and any third country involving India as a transit country. State-of-the-art cross-border exchange of data and information between Bhutan and India will be crucial to ensure the efficiency of trade processes.

64 The Agreement was concluded in 2016. It will enter into force when five member countries ratify or accede to it. Out of the current 53 member States of the UNESCAP, Azerbaijan, Iran and the Philippines have acceded to it while Armenia, Bangladesh, Cambodia and China have signed it.
Bhutan’s position on the signing and ratifying the Framework Agreement is under consideration by the RGoB. The country should consider joining this regional agreement to take advantage of opportunities to access new technologies, innovative practices, technical assistance and capacity-building.

### 3.2.4 Customs modernization

The Department of Revenue and Customs (DRC) is in the process of developing a web-based customs system that will replace the current stand-alone system known as the Bhutan Automated Customs System (BACS). Once operationalized, the new system, being developed as the eCustoms Management System (eCMS), will have the capacity for online declaration, online payments, advance declaration, risk management and reporting functions. It will also expedite customs clearance and release of imports, reduce trade costs, improve transparency in customs operations, and facilitate uniform and predictable application of rules and regulations. The eCMS is geared towards integrating all relevant trade-related agencies in the platform and eventually integrating it as part of the National Single Window (NSW).

Spearheaded by the DRC, there is keen interest in developing an NSW interface for trade facilitation activities to reduce the time and cost of doing business. This issue was explored in 2016 with pre-feasibility studies on the potential impacts that a single window could have on Bhutan’s trade facilitation environment and trading community. The NSW is a logical stepping stone after the launch of the eCMS in 2023. The NSW is already included as a component under the Digital Drukyul Flagship Program whose implementation is led by the Department of Information Technology and Telecom (DITT), Ministry of Communications. The start of work for the development of the NSW is understandably contingent upon the Ministry of Finance’s approval of the reprioritized proposal to be funded through the Government of India’s Trade Support Facility grant during the 12th FYP period.

The DOT has developed a Trade Information Portal (TIP) at www.bhutantradeportal.bt, which was launched on 9 November 2020. The portal is envisaged to provide trade information on countries Bhutan is trading with. Information provided will require details related to service levels and standard operating procedures related to imports and exports. A directory of logistics services available in the country, with details of providers, may be of interest. This trade portal was developed for Bhutanese and foreign traders. When launched, the portal is expected to provide much-needed information for Bhutanese exporters and potential importers of Bhutanese products.

### 3.2.5 Implementation of the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (RKC)

In 2014, Bhutan became the 94th contracting party upon its ratification of the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures (RKC). The Convention aims to simplify and harmonize customs procedures and complements the implementation of the WTO’s TFA, as it contains several disciplines designed to help improve trade procedures involved in the import, export and transit of goods, and increase transparency in trade administration.

Bhutan enacted the Customs Act in 2017 and embarked on an intensive process of revising relevant laws and regulations in accordance with the RKC and other international best practices. As part of the legislative policy reform process, various measures are being examined. These include:

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65 Based on information obtained from the Department of Revenue and Customs, Ministry of Finance.
• Provision of transit rights to facilitate international trade and transport agreements.
• Harmonization of customs documentation, procedures, and formalities through bilateral and regional initiatives.
• Pre-shipment customs clearance facilities.
• Computerized security checks and quarantine facilities.
• Participation in the UNESCAP Framework Agreement for Paperless Trade.

The results of the 2017 Time Release Survey (TRS) show the average time from the arrival of goods (time of filing declaration) at Customs to the final release for all types of cargo for third-country imports takes 6 hours and 50 minutes for non-taxable or exempted goods and 16 hours for taxable goods. The total average time to complete Customs procedures is 2 hours and 45 minutes for non-taxable or exempted goods and 9 hours and 57 minutes for taxable goods.66

Customs is not the sole agency involved in the control of goods for imports and exports. Currently, there are 11 agencies directly or indirectly involved in the clearance of goods for entry and exit.67 All imported and exported goods have to be presented to Customs officials and transacted through a designated entry and exit point. Unlike other countries, the import of goods via roads is divided into two different clearance processes, imports from India and imports from a third country, mainly to fulfill the regulatory requirements as the processes and levies are different.

Customs controls import of air cargo through the cargo manifests that airlines submit in hard copy. Import via land transport from Countries other than India (COTI) is controlled via submission of consignment notes, packing lists and bills of lading. Imports from India via land transport represent approximately 80 percent of the volume of imports, most of which enters Bhutan via Phuentsholing.68 At present, records of incoming cargo in Phuentsholing are dependent on declarations submitted by clearing agents. Declaration of incoming cargo manifests is the responsibility of transporters and not the clearing agents. The present practices have evolved given the constrained physical facilities at Phuentsholing customs area and the large volume of incoming cargo traffic. This poses a challenge for Customs to establish a comprehensive register of incoming cargo as Customs does not currently have the means to cross-check incoming cargo against declarations.

Imports from India are free of customs duties given the free trade agreement between Bhutan and India. Imports from COTI attract customs duties at varying rates as per established customs tariffs. Other than the computation of duties and taxes, it is proposed that the processes of and steps for import be standardized, irrespective of the country of origin. At present, the import process for India in the Bhutan Automated Customs System is different for imports from COTI. In the future eCMS, it is proposed that all imports follow the standard processes of declaration, assessment, inspection and payment, irrespective of country of origin. Supporting documents and computation of duties and taxes will be specific to the country of origin but the process flow will be standard.

3.2.6 The way forward

Although progress has been made in the area of trade legislation, there remains significant untapped potential in the implementation of trade facilitation policy in Bhutan. For this to take place, the country will need to prioritize the coordination and cooperation between the various public and private stakeholders as well as with neighbouring countries.

66 https://www.unescap.org/sites/default/files/05%20Bhutan%20TTFM%2005_2.pdf
67 The 11 agencies are: Department of Revenue & Customs, Bhutan Agriculture and Food Regulatory Authority, Department of Livestock, Department of Forestry, National Environment Commission, Department of Trade, Department of Industry, Bhutan Narcotics and Control Agency Drugs Regulatory Authority, Department of Immigration, Royal Bhutan Police, Bhutan Information and Communication Authority
Bhutan has embraced international trade and investment to support its socio-economic development aims. This includes removing constraints to growth, prioritizing private sector development, and emphasizing trade and investment as drivers. But trade is constrained by geography and trade facilitation is a primary concern. One of the factors limiting the country’s opportunity to diversify export markets and products is the high costs of trade. According to the most recent data from the World Bank on Logistics Performance, Bhutan ranks only 149th in the world (135th in terms of overall efficiency of trade clearance and other formalities). Preliminary results of the UN Global Survey on Digital and Sustainable Trade Facilitation 2019 confirm that Bhutan remains behind many Asian economies in trade facilitation.

Bhutan trade is still affected by significant non-tariff barriers. Many firms face significant trade-related challenges related to risk management, automation of procedures, cumbersome documentation, transparency and the quality of infrastructure. They also lack knowledge of international market requirements and demands. SMEs also face issues during transit given Bhutan’s dependency on its neighbours for trade routes. Traders face problems, with goods detained at checkpoints and cumbersome documentation procedures. There is a need to improve logistics and infrastructure in the country. Given the landlocked status of Bhutan, any future strategy will have to reflect on ways to reduce transport costs and travel times between Bhutan and other countries.

Paperless trade can make trade more efficient and transparent while improving regulatory compliance. Building on government plans for widespread digitalization, further accelerating paperless trade implementation can support trade development in Bhutan.

Bhutan is not a member of the WTO, but estimates suggest that if Bhutan implements the trade facilitation measures included in the WTO TFA along with paperless trade, it could achieve trade cost reductions of around 30 percent (compared to 10 percent if the country aims for basic compliance with the TFA alone).

This is anticipated to be a major challenge for Bhutan as it will require careful navigation of different stakeholder interests with conflicting priorities and targets. The key trade facilitation issues faced by Bhutan are complex. The main ones are summarized below:

**Lack of transparency in import and export procedures**

Bhutan’s cross-border trade is governed by a number of regulatory frameworks that lack the necessary clarity and simplicity. Multiple agencies imposing various requirements that often overlap and multi-agency controls at entry points combine to result in legal uncertainty. Customs procedures for the clearance of imported goods from third countries follow different processes and steps than those from India. Bhutan also lacks a central information centre where traders can obtain the necessary support and information required for importing and exporting.

In 2016, the ADB indicated that websites currently maintained or operated by various stakeholders and client groups in Bhutan do not meet the criteria of a Trade Information Portal as stipulated by the WTO-TFA. The website maintained by the DOT was deemed to be more of a trade promotion site. It does not display information from a broad range of stakeholders on the step-by-step provisions for cross-border trade. A TIP has now been officially developed by the DoT but there is limited information provided.
Limited web-based system

The BACS was implemented and operationalized in 2002 to gather and generate information at the national level, creating digital declarations and automating the calculation of duties and taxes through a harmonized and integrated approach. While the system may appear at first glance to be computerized, the declaration process remains manual and paper based. The declarant must carry a paper declaration by hand from one office to another and from one customs officer to another. The BACS was designed without the involvement of other related agencies and financial institutions. It operates as a stand-alone system instead of running on a centralized database and server. The application for the database runs on a local server at each regional office and border check post, thereby creating a problem of synchronization whenever there are system updates as well as when uploading daily transactions from local servers to the main database.

The DRC has now initiated the development of a centralized web-based system called the Electronic Customs Management System (eCMS), which interfaces with the Revenue Administration Management and Information System (RAMIS) developed in 2016 with ADB financial support. The latter was implemented to facilitate online payments of taxes and other revenues. The eCMS is intended to allow Customs to create an enabling environment to reach out to traders and taxpayers to foster voluntary compliance, facilitate cross-border trade, and simplify customs procedures in a more transparent manner. There is an urgent need to develop and complete the eCMS to support electronic filing and make it aligned with international standards in meeting the demands of the private sector and relevant government agencies.

Lack of sanitary and phytosanitary testing laboratories

Bhutan lacks adequate sanitary and phytosanitary (SPS) infrastructure in terms of numbers of laboratories as well as the skilled personnel needed to carry out the required tests both for export certification and import monitoring. The National Food Testing Laboratory (NFTL) located in Yusiphang, Thimphu ensures SPS compliance. BAFRA is the designated competent authority to coordinate all biosecurity activities; it has been identified as the certifying body in the country. Currently, there is no web-based portal dedicated to disseminating SPS-related information and documents.

The export of food products to India requires country-of-export certification. Food products must be packed in a manner that facilitates the inspection and collection of samples. Exports to India must adhere to India’s Food Safety and Standards Food Authority of India (FSSAI) Import Regulations, 2016 and the General Grading and Marking Rules, 1998. Similarly, export of cardamoms and chilies must satisfy food safety certification by border customs authorities from reputed institutions in Kolkata.

Any food product exports to India must be sent to laboratories accredited by the Food Authority of India. To complicate matters, India does not recognize the test certificate issued by BAFRA for processed food but makes it compulsory for exporters to comply with and produce the certificate issued by FSSAI.

Similarly, the export of goods to Bangladesh requires certification either from the importing country’s certifying authorities or from a third-country laboratory accredited by the International Organization for Standardization (ISO) or the South Asian Regional Standards Organization (SARSO) in Dhaka, Bangladesh. Most tests requiring sophisticated equipment and techniques are outsourced by sending samples to India and Thailand, incurring delays and high costs.
To facilitate trade and make Bhutanese products more competitive, there is a need to assess the current inventory of SPS and technical barriers to trade infrastructure, legislation and capacity-building, including the signing of a mutual recognition agreement, certification and accreditation.

**Lack of coordination and cooperation**

The lack of coordination and cooperation among the various stakeholders involved in trade policies is a significant challenge as there are at least seven departments or divisions within the MOEA and at least nine trade-related ministries and autonomous agencies. For instance, BAFRA under the Ministry of Agriculture and Forests plays a key role on SPS issues while the Bhutan Standards Bureau (BSB) takes the lead on standard-setting matters. In this regard, there is significant room to strengthen consultations with the DOT.

The complex institutional environment and irregular inter-ministerial cooperation hinder the mainstreaming of trade-related issues, which results in measures being reactive rather than proactive. Considering these challenges, the NTTFC was established with the primary objective of bringing together the various stakeholders, including private sector representatives, to improve coordination and cooperation on trade policy. However, the committee’s position and authority remain unclear as there is no binding legal requirement for participation under any legislation. Further, the NTTFC Secretariat is housed at Customs whose national mandate covers enforcement issues rather than policy-related matters. The lack of concordance between protocols and standard operating procedures among trade enforcement agencies within and outside the country remains a challenge for the smooth facilitation of trade.

**Limited capacity-building and institution building**

Effective and sustainable capacity-building is critical to achieving a more efficient and modern trade and transport facilitation regime. It requires strengthening institutions and developing human resources in relevant government agencies and the private sector. Inadequate capacity-building has proven to be a major constraint on trade facilitation. In-house professionals and the technical capacity to undertake trade facilitation initiatives are inadequate. It has become a major priority to upgrade the skills and knowledge of personnel working in all sectors of the international supply chain to implement best practices in cross-border trade.
3.3 Logistics and transport

3.3.1 Logistics and transport issues

The average number of procedures for completing import or export in Bhutan is higher than in many countries in Asia. However, caution needs to be taken with a series of caveats because Bhutan’s trade process involves transit in India, which naturally increases the number of procedures. In any case, the large number of trade procedures generally prolongs the trade process and adds to trade costs. This is a challenging environment for logistics service providers in Bhutan as the industry is not well-recognized and logistics itself, as a discipline, is non-existent in the country.

Box 3.3: The logistics situation in Bhutan

Certain logistics service providers (LSPs) in the country are able to offer courier, air freight, sea freight, road transportation, logistics value-added and custom clearance services. Road/air services are sometimes offered with road transport to Kolkata and then by air as the rates are cheaper when compared to air freight from Bhutan.

Import issues

LSPs prefer to work with Ex Works or Free On Board–based imports as international sellers tend to add a lot of hidden costs under cost, insurance and freight (CIF) of which Bhutanese importers are generally not aware.

According to the LSPs, cold chain logistics does not exist in Bhutan at the commercial level even though there are some cold storage facilities. There is also a need to create awareness among importers and to provide basic education and training on logistics. To begin with, a comprehensive study on logistics would be useful to understand the reality on the ground, potential future needs and a strategy for development of the industry.

Export issues

Certificates issued by Bhutanese agencies for exports are not recognized by importing countries.

Source: Interviews with logistics services providers in Bhutan.

Policymakers from both Bhutan and India need to discuss ways to review the necessity of each procedure and remove any procedure that does not add value to import or export. The bilateral transit procedure that was developed in the early 1980s may need to be reviewed and updated to incorporate new developments, like the introduction of dry ports in Bhutan and the opportunities offered by digital technology in speeding up trade and transit processes. The average number of documents submitted for completing the import process is 29; for exports, 20. On the other hand, these documents (originals and copies) need to be submitted 86 times on average for import and 74 times for export. The necessity of repeated submission of the documents highlights the importance of introducing an NSW to substantially reduce the number of submissions. To better facilitate trade, a review of all these documents is necessary and whether the documents can be submitted electronically. Transit through India is fundamental to enhancing trade and transport efficiency of Bhutan’s imports. The ADB and UNESCAP (2017) study shows that 67 percent of the import cost is directly attributed to transport (not including maritime transport from other countries to Kolkata) and transit clearance. Efforts from India and coordination at the South Asia Subregional Economic Cooperation (SASEC) level are important.
The average speed along the corridor under study is very low. For example, average speed with delays is 9 kilometres per hour (km/h), and without delays is 15 km/h along the Kolkata-Phuentsholing corridor. The average speed with delays is about 5 km/h, and without delays is 16 km/h along the Burimari–Phuentsholing corridor. Such low speeds indicate that the corridors face numerous challenges, such as low-quality infrastructure, old transport vehicles and equipment, and repeated inspection of vehicles and cargo. These need to be addressed if transport and logistics efficiency is to be improved.

In terms of air freight, in 2019, Paro accounted for 6 percent of exports and 5 percent of imports in terms of total monetary values. This is very limited and for a landlocked country, air freight needs to be considered seriously. Drukair (Royal Bhutan Airline) is willing to give special rates for exports. It is therefore important for Bhutanese exporters and importers to consider this option more often, as long as it fulfils their requirements.

3.3.2 Transit corridor assessment

Bhutan is dependent on transit traffic through India for access to the sea and third-country markets. There are three main transit corridors: Phuentsholing-Kolkata, Phuentsholing-Burimari/Banglabandha, and Phuentsholing-Birgunji. Of the three, the Kolkata corridor carries the most regular and substantial freight flows, as it is used for the transit of third-country goods. The performance of this corridor is, however, hampered by operational delays in the port of Kolkata, a lengthy clearance procedure and by frequent strikes en route. Joint efforts by the public and private sectors and better cross-border coordination are needed to remove regulatory and other constraints to the movement of cargo along this corridor.

The main transit trade takes place in Phuentsholing/Jaigaon to the Kolkata port corridor. The average travel time for the distance of approximately 750 kilometres is three to four days. Movement of goods along this corridor faces non-physical barriers. Trucks are often delayed because of political strikes blocking the roads, checkpoints and border stations. Other problems encountered are delays in the transit clearance in the port and numerous in-transit checkpoints. Bhutanese trucks are also blocked from carrying goods along this corridor.

Freight traffic between Bhutan and Bangladesh moves along the Phuentsholing/Jaigaon-Chengrahandha/Burimari (115 kms) or Phuentsholing/Jaigaon-Fulbari/Banglabandha (155 kms) corridor. These corridors are used to export horticultural and mineral products and import garments and melamine products from Bangladesh. Both suffer from poor equipment and a lack of electricity at the border station at Burimari, as well as the lack of a warehousing facility. However, Burimari is a permanent border station and staff have to be sent from a border station 50 kilometres away. Traders also report frequent local disturbances and are often requested to make informal payments.

For landlocked countries, the easy movement of trucks through transit countries is critical to move goods efficiently. The ADB and UNESCAP (2017) study reviewed the movement of goods along the four corridors and identified the following areas to facilitate the movement of goods through transit countries:

- While some inspections, such as checking travel documents and (in some cases) inspecting goods, along corridors are necessary and valid, repetitive and unnecessary inspections should be eliminated.
- Improvements in transport infrastructure are needed.
- Promoting the use of containerized vehicles, where possible, would help reduce travel time. For Bhutan, once containers are sealed in Kolkata, they should be removed only

69 The checkpoints do not officially exist between Kolkata and Phuentsholing except at the border checking post in Jaigaon. The main problems are localized in nature, for example, asking for contributions from drivers for festivals or other purposes and local strikes both of which are a nuisance, causing delays and adding costs.
in Phuentsholing. The cargo inside the containers should not be inspected during the journey.

- Transport and logistics service providers should be encouraged to introduce best practices related to road safety, deployment of drivers for long drives, and measures to introduce discipline and professionalism among drivers.
- Cargo tracking should be a part of the procedure of trade in transit.

### 3.3.3 Current transport issues, including transit to Bangladesh and Nepal

Limited connectivity is reflected in the disproportionately high costs of trade. The costs of trading, which are a reflection of the transportation and logistics infrastructure and the efficiency of customs and border procedures, are considerably higher within South Asia than in other trade blocks of comparable size.

A key obstacle to trade within the region is the disproportionately high costs of trading, arising from a range of factors, such as: complex customs procedures, inadequate infrastructure at many border points, compliance costs associated with non-tariff measures, and so forth. A key aspect of trade costs is connectivity, which depends on backbone transportation services between countries, such as air travel. The efficiency of air travel services can affect both trade in goods and trade in other services, as the transport of high-value, low-volume goods and services, such as tourism, health care, and education, often depend on air travel services. Moreover, the efficiency of air travel for businesspeople can also affect FDI, and, ultimately, trade in goods and services.

To facilitate the movement of trucks across South Asia Subregional Economic Cooperation (SASEC) borders, the Bangladesh–Bhutan–India–Nepal Motor Vehicles Agreement (BBIN-MVA) was signed in 2015. Bhutan has yet to ratify the agreement. The delay in ratification is mainly due to concerns about environmental degradation and the inability of existing road infrastructure to cope with traffic.

In light of the BBIN Motor Vehicles Agreement, the agreement presents both the challenges and enormous opportunities to enhance transport efficiency along the BBIN corridors. On the one hand, the current average speed of vehicle movement along the corridor is very low. On the other hand, if a vehicle traveling the SASEC corridor can maintain a speed of 30 km/h from Kolkata to Phuentsholing, which is still low compared to the average speed along the Central Asia Regional Economic Cooperation corridors, potentially 67 hours or approximately two thirds of the journey time can be saved on average.

Policymakers and other stakeholders should treat this as encouraging news because once measures to streamline trade and transport processes are put in place, substantial improvements in transport times along the corridors can be expected. The importance of India’s efforts and coordination at the SASEC level in this regard are underscored.

### 3.3.4 The way forward

Gaps in border infrastructure is a major trade facilitation challenge facing the private sector. Bhutan is not linked to other countries by railway and has no seaport. As such, the country relies heavily on India’s road system as well as the port system in Kolkata. The majority of trade takes place at the Jaigaon–Phuentsholing entry point, but the customs infrastructure at both Phuentsholing (Bhutan) and Jaigaon (India) needs to be improved to handle the increasing volume of imports and exports. In particular, the land customs post in Jaigaon lacks parking space for trucks and is not digitally connected to the Customs in the seaports in Kolkata. In
addition, goods arriving from third countries and transiting via Kolkata Port are unloaded, broken down and then loaded onto a Bhutanese truck in Phuentsholing, which slows the movement of goods.

Logistical inefficiencies also stem from different border agency facilities in different parts of the city, including weighbridges, warehouses, clearing and forwarding agents, and temporary sheds, which have also contributed to increased traffic congestion in the city. Trade transactions are also affected by high vehicle and documentation traffic. For example, a consignment passing onward to Bangladesh must clear border formalities at Phuentsholing, Jaigaon, Changrabandha and Burimari. The lack of international banking facilities at border points forces traders to travel to other parts of Bhutan to process simple banking transactions such as letters of credit.\(^70\)

Recognizing the need for a dry port to address some of these challenges, the Royal Government of Bhutan, with financial assistance from ADB, has built a small dry port at Phuentsholing. The dry port is equipped with the necessary cargo handling and storage facilities under Customs control, with associated capabilities for clearing and forwarding goods, warehousing, trans-shipment and transit. The completion of the dry port has eased some constraints and pressures. The planned construction of a dry port in Pasakha will further ease constraints as exports and imports from and to the Industrial Estate do not need to pass through Phuentsholing. Further, a dry port in Gelephu is also in the works and feasibility for it is planned in Nanglam. Similar facilities need to be developed in other entry and exit points as well.

The COVID-19 pandemic has also created logistical challenges for Bhutan’s export and imports as illustrated in Box 3.4. Due to the closure of the neighbouring Indian border province due to the pandemic, the Food Corporation of Bhutan (FCB) has not been able to sell Bhutanese agricultural produce, while Customs has had to develop innovative ways of how to address and reduce the additional risks brought about by the pandemic.

Box 3.4: Impact of the COVID-19 pandemic on transport, transit and logistics

Given the international trade landscape of Bhutan, the ongoing COVID-19 pandemic has posed immense risk and challenges to the cross-border regulatory and law enforcement agencies. On a positive note, it has led to a high level of border coordination and cooperation among all the border agencies, not only in Bhutan but also globally. Due to the immense risk posed by COVID-19 and the strategic role Customs holds in the international trade supply chain, greater responsibility has been bestowed upon Customs to safeguard their nation’s borders at all costs. Under such conditions and given limited resources and technology advancement, Bhutan Customs has initiated innovative measures to minimize risks. Zero-contact Customs clearance procedures have been considered at the land borders where a huge volume of consignments and goods are brought into the country in foreign transport and carriers with foreign drivers.

Among the measures put in place, the Royal Government of Bhutan has initiated various strategies to contain the community spread of COVID-19 and stop its influx into the country from across the border. Thus, greater pressure and responsibility has been placed on Customs, especially at the land borders where the transporters and carriers are largely illiterate. To ensure successful containment, Bhutan Customs has adopted innovative measures which are briefly presented below with the aim of achieving zero-contact Customs clearance and release consignments with minimal interference by the Customs officials.

For instance, loaded vehicles enter the Customs area and documents are placed by the foreign driver themselves in the assigned drop box. The vehicle is then directed to the trans-shipment bay to trans-ship into the Bhutanese vehicle. The trans-shipment is carried out by assigned individuals in a coordinated manner, using proper protective gears and maintaining appropriate physical distancing. The foreign driver is then escorted to the temporary makeshift to rest and wait until the

Box 3.5: Promoting women’s participation in transportation and logistics

According to the study, Challenges Facing Micro and Small Businesses Owned and Operated by Women in Bhutan (2018), what can ultimately benefit the nation as a whole is a strong drive by the government to support policy for business and entrepreneurship development in logistics and transport with a special focus on women. Improving women’s capacity to earn through business and entrepreneurship and enhancing their capacity to invest in their children’s education have a huge potential for positive chain effects on the quality of available human resources, which in turn could contribute towards the nation’s social and economic development.

The lack of or a low level of formal education and business skills makes it harder for women to join the logistics and transport sector. It is important for the Ministries of Education and Labour and Human Resources to adopt a curriculum suited to prepare young graduates with business and entrepreneurial skills. It may be worth considering for the education system to have supplementary subjects that would prepare students for self-employment in the MSME sector right from the lower-level classes. The Non-Formal Education (NFE) curriculum can focus on business and life skills modules.

Programmes for women must focus on enhancing business skills as well as developing the sense, awareness and ability to understand and undertake calculated risks when it comes to business. The training should be tailor-made to benefit women from different socio-economic backgrounds.

There is no doubt that the government has been able to formulate enough policies, strategies and regulations to create an enabling business environment. However, the results of their implementation have been mixed, either due to lack of coordination between the implementing agencies or a shortage of funds and human resources. Implementing policies to encourage women to enter into or start their own businesses shows huge potential to help address key national development issues, such as unemployment, regionally imbalanced development, poverty and gender-related problems. Trade, logistics and transport as a key economic sector requires women to be more actively involved for the economic development of the country.

3.4 Recommendations

Based on the above assessments, this chapter recommends the following measures be taken to further enhance trade, logistics and transport facilitation.

3.4.1 Short-term recommendations

These short-term actions are designed mainly to avoid repetitive processes, reduce costs and harmonize documentation requirements:

- Improve border coordination: Place all relevant agencies in the dry port that functions as a branch of the Regional Trade and Industry Office (RTIO) for on-site clearance of documents.
- Electronic filing and exchange of documents: Implement online application and approval, issuance and renewal of licences, certificates and permits for a number of similar processes across government organizations, and between government organizations and stakeholders.
- Finalize protocols in the Transit Agreement with Bangladesh: While the agreement has been signed, protocols need to be finalized and implemented.
- Harmonization of data and information with standardization of documents: Establish the electronic exchange of documents (among Customs departments in Bangladesh, Bhutan, Nepal and India) for transit clearance in India.
- Removal of redundant or repetitive procedures and documents: Rearrange the internal workflows of the regional Revenue and Customs offices.
- Enhanced availability and accuracy of information on rules, regulations and guidelines.
- Continued efforts towards customs automation: Introduce the National Single Window and ensure legal consistency for the introduction of a National Single Window and electronic procedures.
- Enhanced payment remittance systems.
- Introduce certificate- and diploma-level courses in transport and logistics.
- Identify a more active role for the private sector: Strengthen professional relationships among all parties involved in the trade process.

3.4.2 Long-term recommendations

These long-term actions aim to promote the seamless exchange of information and use of modern tools to facilitate trade:

- Further development of transport and logistics infrastructure in Phuentsholing and the rest of the country: Carry out a needs assessment and development study on the modernization of the logistics industry in Bhutan as the industry lacks focus and concerted support.
- Strengthen transport and transit with India and Bangladesh.
- Ensure transparency in legal, policy and procedural requirements.
- Establish authorized economic operator and trusted trader programmes.
- Upgrade the skills of frontline officials, including in information and communications technology, to support the implementation of modern tools.
References


CHAPTER 4

BUSINESS CLIMATE, CSI DEVELOPMENT AND ACCESS TO FINANCE
4.1 Introduction

Similar to other developing countries, Bhutan’s economy is dominated by micro-small and medium-sized enterprises (MSMEs). Keeping these smaller enterprises in business and facilitating their growth are critical to the long-term, sustainable development of the country. This chapter considers a range of issues of primary importance to fostering the growth and development of smaller firms, including specific obstacles in the business climate and operating conditions for MSMEs and cottage and small industries (CSIs) in Bhutan, issues related to financing available for such firms, and the impacts of external shocks. Bhutan’s domestic economy is small and fragmented, making it especially important for firms to consider overseas markets as a key part of a robust growth strategy.

The RGoB has been working hard to foster the growth of the small business sector, particularly in the last decade. However, a wide range of initiatives have thus far not yet delivered the expected levels of economic growth from the sector. The chapter draws on a range of interviews conducted with key stakeholders in Bhutan to develop a set of specific recommendations to enable the CSI sector and small trading businesses to become more resilient in the near-term. Bhutan’s MSMEs tend to be extremely small. Generally, they can be characterized as closer to the first “M”, “micro”, than the latter “M”, medium. Most are small-scale import operators working with trade in goods or retail establishments selling largely imported products. The impact of COVID-19 highlights the overall importance of trade to the health of the economy in Bhutan. Although Bhutan has had few domestic cases of COVID-19, the closure of borders and disruption of trade has hit smaller businesses hard.

Despite having a range of potentially competitive products, the export performance of Bhutan’s CSI sector is poor. In part, the challenges are practical: difficulties in meeting standards and regulations in possible export markets, an inability to get products certified within Bhutan, high costs (especially transport), and a lack of e-commerce and digital platform opportunities to expand into overseas markets.

Future policies should emphasize the need to get CSIs online and be provided with the necessary digital services. It is noted that with electronic platforms to conduct business, CSIs are able to expand their scope and reach, at minimal additional cost to their operations. Moreover, it also eliminates potential disruptions or challenges at border crossings.

CSIs in services, in general, have not received the same level of attention as those in manufacturing or production. This is a peculiar situation, given the overall importance of services, such as travel and tourism, to Bhutan’s overall economy and the overwhelming dominance of CSIs in services in the economy as a whole, compared to the relatively small size and impact of Bhutan’s manufacturing and production sectors. Getting CSIs to grow also means thinking about how to acquire the necessary skills that will drive smaller firms in the services sector and promote export potential across the board.

4.1.1 Chapter overview

This chapter is divided into five main sections. It begins with an overview of the CSI sector in Bhutan and provides some statistics about the business climate in the country and its progress since the first Diagnostic Trade Integration Study (DTIS) in 2012. Smaller firms are faced with a number of specific challenges, including difficulties with registration, licensing and taxes. Section 4.3 highlights the situation for firms in the area of financing, which can impede the ability of firms to get started and/or expand. The subsequent section reviews specific policies designed to foster CSIs in Bhutan. The spread of COVID-19 has had a substantial impact on
the CSI sector as well as on micro and small retail and wholesale traders in the country, despite the relatively small number of domestic cases as of 21 September 2020. The nationwide lockdown of 21 days imposed in August, in addition to over 6 months of regulated operations for small businesses, as well as closures of service businesses continue to significantly affect the MSME sector in the country, as Section 4.5 notes. Finally, the chapter concludes with a set of policy recommendations based on extensive interviews conducted across the country with government and industry to encourage the growth of the CSI sector in Bhutan.

4.2 Business and investment climate

4.2.1 CSI characteristics and key sectors

Bhutan’s business sector is dominated by micro and small businesses. Smaller firms make up 95 percent of the total number of businesses. As shown in Figure 4.1, Bhutan’s businesses are largely found in two categories: services and trading companies.

Figure 4.1: Total number of businesses in each sector

<table>
<thead>
<tr>
<th>Scale of industry</th>
<th>Employment size</th>
<th>Investment (BTN million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage</td>
<td>1 to 4</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Small</td>
<td>5 to 19</td>
<td>1–10</td>
</tr>
<tr>
<td>Medium</td>
<td>20 to 99</td>
<td>10–100</td>
</tr>
</tbody>
</table>

Source: Department of Cottage and Small Industry, MoEA.
The MSME sector is currently divided by the RGoB into trade (or retail) enterprises and industrial enterprises. The latter is further broken down into three categories: i) production and manufacturing, ii) services and iii) contract (construction contractors). Overall, this existing division of MSMEs does not match with existing best practices for classifying MSMEs globally, nor does the split make a great deal of sense when reflected against Bhutan’s economic development plans that likely require different types of policies to support the diverse needs of MSMEs (Table 4.2).

Table 4.2: MSMEs and CSIs in Bhutan

<table>
<thead>
<tr>
<th>Micro, Small and Medium Enterprises</th>
<th>Cottage and Small Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro. Small and Medium Enterprises include Cottage and Small Industries as well as wholesale and retail trading businesses.</td>
<td>Cottage and Small Industries is defined in Bhutan as economic activities covering the production, manufacturing, services and construction sectors.</td>
</tr>
<tr>
<td>Micro business is defined as a business that engages in trading with an annual turnover of less than BTN 1 million.</td>
<td>Cottage industries are defined as industries with less than BTN 1 million investment engaging up to four people.</td>
</tr>
<tr>
<td>Small business is defined as a business that engages in trading with an annual turnover of between BTN 1 million and BTN 5 million.</td>
<td>Small industries are defined as industries with BTN 1 million to BTN 10 million investment engaging between 5 and 19 employees.</td>
</tr>
<tr>
<td>Medium business is defined as a business that engages in trading with an annual turnover of between BTN 5 million and BTN 10 million.</td>
<td>There are an estimated 21,813 CSIs in Bhutan. 79.9 percent of CSIs are in the services sector.</td>
</tr>
<tr>
<td>8.38 percent of CSIs are in the construction sector. 11.72 percent of CSIs are engaged in manufacturing or production activities.</td>
<td>There is less than 2 percent FDI into CSIs.</td>
</tr>
</tbody>
</table>

Source: Department of Trade and Department of Cottage and Small Industry, Ministry of Economic Affairs.

The importance of boosting and promoting Cottage and Small Industries in Bhutan was first reflected in Bhutan’s 3rd Five Year Plan (FYP) in 1971–1976 as a primary goal of the RGoB. This focus on supporting smaller firms continued, with the latest policy guidance reflected in the 2016 Economic Development Policy that highlighted three MSME sectors (Cottage and Small Industries, Agriculture and Tourism) as part of the five priority “jewels” of the economy.

The CSI Policy 2019, passed by the Ministry of Economic Affairs in July 2019, aims to realign the provisions to the changing business environment to stimulate the growth of CSIs in Bhutan. CSIs account for more than 95 percent of the total number of industries in the country, playing a critical role in the industrialization and diversification of the economy as well as employment creation. The RGoB designated CSIs as one of the priority flagship programmes of the 12th FYP.

As of June 2020, there are 21,813 active, licensed and registered CSIs in Bhutan. However, a significant percentage of these businesses remain in the informal sector. Data from the World Bank in 2015 estimate that approximately 9.6 percent of firms in Bhutan choose to practise in the informal sector. 72 Nearly 80 percent of CSIs are in the Services sector, 11.72 percent in the Production and Manufacturing sectors, and 8.56 percent in the Contract (Construction) sectors.
sector. These figures represented an increase of 1,930 new CSIs from 2018 to 2019, of which 1,772 were cottage size (or micro) services enterprises. CSI data do not take into account the cottage, small and medium trading enterprises. Almost 63 percent of businesses in Bhutan operate in the trade sector, mostly as retail trade establishments. As Figure 4.2 shows, the wholesale and retail trading subsector made up for 63 percent of business activity.

Figure 4.2: Percentage of business activity in Bhutan

![Percentage of business activity in Bhutan](source: Economic Census 2018–2019)

Given the importance of the CSI sector, Bhutan has introduced several pieces of legislation and guidelines along with fiscal incentives to foster private sector growth. However, as this chapter and section show, the business and investment climate in the country remains challenging as reflected by such indicators as a decline in the number of business enterprises in the country or the decline in the country’s ranking in Ease of Doing Business in the past five years. Although the government has put in place several business reforms from 2012 to 2020, businesses have not benefited from these reforms as much as might have been expected.

Box 4.1: Summary of main achievements and setbacks since DTIS 2012

Since the Diagnostic Trade Integration Study 2012, numerous initiatives and policies by the RGoB have been implemented to create a strong, conducive business and investment climate. Since 2012, a total of 23 policies and acts have been adopted that directly support the creation of an enabling business environment for MSMEs. The DTIS 2012 highlighted specific activities directed at improving the business climate, developing MSMEs and enabling access to finance. In this regard, significant achievements have been made in the following targets set in DTIS 2012:

2.1 – Entrepreneurship development – Build up a class of entrepreneurs (SMEs)
2.2.1 – Strengthen the institutional framework for SMEs
2.2.2 – Create a legal and institutional framework for business infrastructure
2.2.3 – Set up consultative services (branding, marketing, packaging, technology transfer, GIs and other IPRs) for SMEs
2.2.4 – Provide incentives to manufacturing firms to develop business in Bhutan
2.3.1 – Set up a task force for the promotion of SMEs linkages
2.3.2 – Support enterprise-led solutions
3.1 – Increase FDI attractiveness

73. National Statistical Yearbook 2019, National Statistics Bureau
4.2.2 Ease of doing business

Smaller firms and start-ups cannot easily manage complicated, burdensome and inefficient procedures to start and maintain businesses. Bhutan ranked 89 out of 190 countries in the World Bank’s 2020 report on the ease of doing business, Doing Business 2020, with an overall score of 66 out of 100. Figure 4.3 illustrates that the country ranked high in the following indicators: Paying Taxes (15th), Trading Across Borders (30) and Enforcing Contracts (29). It, however, ranked significantly lower for the following indicators: Starting a Business, Protecting Minority Investors and Resolving Insolvency. Figure 4.4 shows Bhutan’s overall progress since 2013.

There also have been setbacks due to weak alignment of policies, procedures and planning and coordination, and a lack of consensus and communication among key stakeholders. The following activities proposed in the DTIS 2012 have not been implemented:

1.1 – Seek out an optimal exchange rate policy more supportive of trade and industrial development policies
1.3 – Improve quality and homogeneity of statistical data on trade and FDI.

There are weak systems for follow-up, monitoring and evaluation. Follow-up actions from the DTIS 2012 occurred only in areas where pre-existing donor interests intersected with recommendations from the report (e.g. the EU-Trade Project) and the considerable number of areas that remained were neither followed up nor monitored.

Figure 4.3: Doing business country ranking according to selected indicators in 2020

Figure 4.4: Ease of doing business, Bhutan country ranking for selected indicators, 2013–2019


4.2.2.1 Business registration and incorporation

Bhutan ranked 103 out of 190 countries in the “Starting a Business” indicator in the World Bank’s 2020 Doing Business Report. The country had an overall score of 86.4 out of 100. Recognizing procedural weaknesses in starting a business, in 2016 the RGoB launched the Government-to-Business services online. This enabled 34 business services, including new business registrations, to be processed online.

The Office of the Registrar under the Regulatory Authority for Companies of the Ministry of Economic Affairs (MoEA) is tasked to incorporate businesses in Bhutan. Company registration is subject to the Companies Act 2006. Since February 2019, parties can now register their businesses online at www.cra.gov.bt.

In May 2020, the MoEA launched a Single Window Corporate Registry System to facilitate both the electronic incorporation of companies and online filing of statutory documents post-registration. This shortened the turnaround time and helped minimize costs of incorporating a business, seeking approval for changes in a company’s records, and availing information and other statutory services. Hopefully, the latest efforts to digitize registration processes will be reflected in next year’s World Bank report.

Efforts such as those cited above that improve business registration and incorporation processes facilitate CSIs to not remain in the informal sector.

4.2.2.2 Facilitation of exports

Exporting goods out of Bhutan is never going to be easy. The mountainous, landlocked nature of the country precludes easy movement of goods over borders. This relative lack of connectivity means that logistics costs are quite high. This creates a competitive disadvantage for Bhutan’s potential CSI exporters, thus underscoring the need to minimize other potential impediments to their business activities. As this chapter suggests, Bhutan needs to facilitate trade by making it easy for MSME firms to consolidate shipments to allow more scale for export destinations and improve the capacity of firms to test and certify products for key foreign markets.

4.2.2.3 Foreign direct investment requirements and sectors opened for FDI

Many economies have been able to improve the domestic business climate and facilitate growth in CSI firms by encouraging inbound foreign direct investments (FDIs). FDIs infuse critically important capital to businesses, generate jobs, and facilitate skills and knowledge transfer.

Following the enactment of its FDI policy in 2002, Bhutan has been steadily liberalizing the investment climate. This has undergone three revisions, in 2005, 2014 and 2019. The RGoB has identified five priority sectors for FDI: 1) Hydropower, 2) Cottage and Small Industries, 3) Mining, 4) Tourism, and 5) Agriculture. In addition, the Low-Impact Manufacturing Sector and Creative and Cultural Industries sectors have been identified to exhibit potential to attract FDI inflows and development.

The FDI 2019 policy allows foreign investments in both the manufacturing and services sectors. Some selected priority sectors have no restrictions to ownership. Minimum investment starts at BTN 3 million and investment is allowed to as much as BTN 300 million. All FDI businesses must be incorporated under the Companies Act of Bhutan 2006 and require a foreign currency account. For CSIs, the FDI 2019 policy permits projects with a minimum cost of BTN 5 million and maximum foreign shareholding of 49 percent. Despite these liberal FDI policies, FDI levels in the country have remained low and have been steadily declining as shown in Figure 4.5.
4.2.3 Challenges faced by businesses

4.2.3.1 Size and location

Businesses in Bhutan have to grapple with the modest size of the domestic economy, with the total population estimated at 772,000\(^4\) and a location that is not conducive to trade. Bhutan is landlocked with limited road and air access. Both factors pose constraints to potential domestic business operations and for companies in accessing wider markets.

The issue of location is compounded by the relative lack of available e-commerce and digital delivery platforms that would enable CSIs to market their goods and services to consumers and distributors outside Bhutan. The lack of depth in the e-commerce sector also prevents digital platforms and logistics companies from stepping up to address these gaps in the market. These challenges tend to increase their business costs, with limited to no opportunities to scale up operations. The lack of platforms and other mechanisms to aggregate goods shipments into bulk or larger quantities drive logistics costs up, which may disqualify CSIs from competing in outside markets.

4.2.3.2 Connections to other markets

Bhutan is heavily dependent on outside markets. Other than its Free Trade Agreement (FTA) with India, it does not have other FTAs with other countries and maintains its Observer status in the World Trade Organization (WTO). These increase the risk of sudden policy shifts that can destroy business opportunities and undermine CSI competitiveness in other markets. Non-participation in the WTO may also dampen inbound investor sentiment because of a lack of confidence in the Bhutanese economy and governance.

In a similar vein, Bhutan’s CSIs that produce goods (agricultural and manufactured products) need enabling environments and locations conducive for business, i.e. industrial estates, warehousing and processing facilities, and storage for consignments. These facilities need to be managed efficiently and at cost levels that encourage CSI growth and development. If done well, such locations could also help CSIs with required customs paperwork, documentation, testing, standards and other obstacles to trade.

4.2.3.3 Business registration and licensing

Although the government has launched digital platforms such as Government-to-Citizen to process business licences and clearances, firms still grapple with numerous requirements and

varied associated processes to secure necessary documents and clearances. For example, location clearances need to be obtained from municipalities in urban and rural areas. However, there are currently no online platforms to facilitate these requests, which adds to the number of days needed to secure these business permits. Similarly, environmental clearances also delay the process of business registration. In February 2020, the National Environment Commission Secretariat repealed Sections 12 and 13 of the Regulation for Environmental Clearance of Projects 2016. While it is too early to determine the impact of the removal of these two sections in the regulation on MSMEs and CSIs, efforts to introduce reforms and streamline processes are slowly being undertaken.

In addition to the FDI 2019 policy, the MoEA has adopted a liberal Economic Development Policy 2016 and the Cottage and Small Industries Policy 2019. However, a lack of procedural clarity by implementing agencies of the guidelines and policies on the ground remain constraints in business registration processes.

4.2.3.4 Contract enforcement

With a score of 70 out of 100, Bhutan ranked 29 out of 190 countries in the “Enforcing Contracts” indicator for the 2019 Ease of Doing Business rankings. The Enforcing Contracts indicator measures the time and cost of resolving a commercial dispute through a local first-instance court. The 2019 Doing Business report states that on average in Bhutan, it takes 225 days to enforce contracts with a Quality of Judicial Process Index of 8 out of 18. The contract enforcement mechanism in Bhutan reflects a strong and efficient existing judiciary system with an average of 225 days to resolve disputes, which is significantly lower than the average of 1,101.6 days in the South Asian region and 589.6 days in Organisation for Economic Co-operation and Development (OECD) high-income countries. MSMEs cannot afford lengthy delays, so efforts by the court system to expedite resolution of disputes are considered positive developments in their favour.

4.2.3.5 Anti-corruption and tax payment

Transparency International reported that in 2019, Bhutan scored 68 points out of 100 on the Corruption Perception Index in 2019. The score has been slowly increasing from 2012, when it ranked 65. Corruption is not only a hindrance to the operation of businesses, but it also serves as a disincentive for potential foreign investors.

Bhutan’s performance in the paying taxes indicator is 15 out of 190 economies in the World Bank’s 2019 Doing Business. It had an overall score of 89.2 out of 100, higher than the regional average of 60.2. This formidable ranking reflects the robust initiatives and programmes of the Ministry of Finance in streamlining taxation measures, and the introduction in 2014 of the online web service, Revenue Administration Management Information System (RAMIS), for payment of personal, business, and corporate income taxes.

4.2.3.6 Competition and consumer protection

Bhutan ranked 82nd in the Global Competitiveness Report of 2018 released by the World Economic Forum, with an improvement of 15 places from 2017. Some legislative and policy initiatives undertaken in this regard include:

- 2014: The Office of Consumer Protection was established under the MoEA to promote and

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4.2.3.7 Intellectual Property Rights

The Department of Intellectual Property under the MoEA has adopted the National Intellectual Property Policy 2018. In April 2020, the Department of Intellectual Property established the Branding Bureau to strengthen business competitiveness and innovation through brands and designs.

The Branding Bureau is a separate office functioning between the Department of Cottage and Small Industry (DCSI) and the Department of Intellectual Property. Many smaller firms live and die on the strength of their ideas. Allowing easy registration, maintaining protection of innovative ideas, and promoting effective enforcement is critical to their survival.

4.2.4 CSI business climate: policies and initiatives

The 12th Five Year Plan 2018–2023 highlights economic diversification through the promotion of exports and the creation of a business-and investment-friendly environment as priorities. In addition, the CSI Flagship Program and the Organic Flagship Program are being implemented under the 12th FYP to support 1,050 CSIs and agricultural producers. Supportive CSI policies also include the Fiscal Incentives Act 2017 that grants qualifying firms a tax holiday of 10 years, and a sales tax and customs duty exemption on importation of industrial equipment and machinery, raw materials, and primary packaging materials. Table 4-3 showcases the wide range of legislative actions and policy frameworks adopted in Bhutan since 2012 to foster a more competitive and facilitating business and investment climate for companies.

Table 4.3: Legislation and policies–business and investment climate

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage and Small Industry Policy</td>
<td>2012</td>
</tr>
<tr>
<td>Consumer Protection Act of Bhutan</td>
<td>2012</td>
</tr>
<tr>
<td>Accounting Standards Rules for Companies in Bhutan</td>
<td>2012</td>
</tr>
<tr>
<td>Contract Act of Bhutan</td>
<td>2013</td>
</tr>
<tr>
<td>Tax Act</td>
<td>2014</td>
</tr>
<tr>
<td>Biosafety Act of Bhutan</td>
<td>2015</td>
</tr>
<tr>
<td>National Entrepreneurship Strategy</td>
<td>2015</td>
</tr>
<tr>
<td>The Companies Act of Bhutan</td>
<td>2016</td>
</tr>
<tr>
<td>Economic Development Policy</td>
<td>2016</td>
</tr>
<tr>
<td>Revised Taxes and Levies Act of Bhutan</td>
<td>2016</td>
</tr>
<tr>
<td>Priority Sector Lending Guidelines</td>
<td>2017</td>
</tr>
<tr>
<td>Fiscal Incentives Act of Bhutan</td>
<td>2017</td>
</tr>
<tr>
<td>Mineral Development Policy</td>
<td>2017</td>
</tr>
<tr>
<td>The Customs Act of Bhutan</td>
<td>2017</td>
</tr>
<tr>
<td>Foreign Exchange Rules and Regulations</td>
<td>2018</td>
</tr>
<tr>
<td>National Intellectual Property Policy</td>
<td>2018</td>
</tr>
</tbody>
</table>

78 A case for secondary packaging materials is required to be made, otherwise one set of packaging materials, for instance labels, are exempted but the carton boxes are taxed.
4.2.4.1 Facilitating business registration

Starting a company and maintaining the required government documentation to operate can be a challenge for CSIs. Processes that streamline procedures, eliminate duplication and encourage efficiency in government services are necessary. In 2016, the Government-to-Citizen Office, together with the MoEA, launched 34 online government-to-business services. These include issuance of new licences and renewal and change of licences. The online system was launched to reduce interface with public officials and promote accountability and transparency, reduce waiting time, streamline procedures and improve public delivery. The MoEA is working on a single window business licensing project (Integrated Business Licensing Services) under the Digital Drukyul Flagship Program.

4.2.4.2 Promoting information and communications technology infrastructure

The future is digital. This is particularly true for smaller firms that need to eliminate unnecessary trips to various ministries and agencies. MSMEs have high demands for information of all types, including the need to efficiently find suppliers, vendors and customers. Problematic and expensive Internet services are additional obstacles to small businesses’ efficiency.

It is therefore commendable that the Department of Trade, Ministry of Economic Affairs has launched the Trade Information Portal in March 2020. Other IT-enabled services for business and investment climate promotion include the ePortal, eRegulations and iGuide Bhutan. Promotion of information and communications technology (ICT) infrastructure to support business development has been emphasized since the Economic Development Policy 2016. In today’s economy, firms can get online easier than ever before, often without possessing any specific digital skills. As an example, a guide might be able to offer online “tours” of Bhutan’s forests and mountains through AirBnB’s “Experiences” portal. This requires only a smart phone to record the journey and Internet access to post it with the host. Textile producers can sell directly online with an Instagram account. Larger scale producers may be able to work with e-commerce vendors like Flipkart to directly access India’s vast consumer market. There is a growing market for online tutoring with a wide variety of platforms that could allow Bhutanese tutors to deliver education services to foreign markets.

4.2.5 Gaps in policy coverage

One clear gap in the policy coverage to support MSMEs has been the overall focus of various government initiatives. To date, most of the focus has been on CSIs, agriculture and manufacturing. While the need for a supportive policy environment of these important sectors is not discounted, what is missing is maintaining focus on the sectors where most MSMEs in Bhutan can be found: trading (mostly importers) and services.
Part of the challenge is conceptual. As noted earlier, Bhutan has an unusual way of considering the small-sized business sector. The trading and services sectors are largely or entirely excluded from most policy plans as they are not captured by the CSI definition. Given difficulties with business registration, some smaller firms have opted to remain in the informal sector.

Most of the existing support measures put in place since 2012 are focused on CSIs and agricultural producers, neglecting the trade sector, which constitutes most of the businesses in the country, 78 percent, with the manufacturing sector, at 22 percent, a distant second.\textsuperscript{79} The Department of Cottage and Small Industry (DCSI) activities, as well as the overall 12th FYP programmes, focus on production and manufacturing businesses, although only 8.6 percent of registered firms are engaged in production or manufacturing businesses. The services sector engages 79.9 percent of enterprises but there are no specific policies or programmes under the DCSI or other stakeholders in place to support the development of the sector.

There are currently three main organizations promoting CSI development in the country: (i) DCSI and (ii) the Agency for the Promotion of Indigenous Crafts (APIC), both under the Ministry of Economic Affairs, and (iii) the Department of Agriculture and Marketing Cooperatives (DAMC) under the Ministry of Agriculture and Forests. Given the importance of the sector, it is worrying that there appears to be a lack of consistency in definition of CSIs, leading agencies to prioritize different aspects. Even though the DCSI understands CSI to be enterprises in manufacturing, construction and services, the government’s Priority Sector Lending (PSL) guidelines and other agencies include agricultural producers and retail and wholesale enterprises in the same category.

Overlapping responsibilities across agencies seems to be leading to duplication of work between CSI stakeholders. Due to the lack of clarity, three government agencies—DCSI, DAMC and APIC—all provide business grants as well as entrepreneurship and business support. Although the creation of an investment mark has been highlighted, activities remain unclear.

Existing support programmes require a trade licence. However, most micro and small producers in both the agricultural and crafts sectors do not register for one. This indicates that there is a huge number of informal firms who are not able to access and benefit from existing programmes and incentives.

\textbf{4.2.6 Policy recommendations to improve the business climate for MSMEs}

- Government efforts to support and facilitate MSMEs are hampered by a focus that appears to leave out the critical areas of importance to smaller firms: trading and services.
- It is hard to improve things that are not properly measured. Given overlapping definitions and unclear parameters for what constitutes an MSME or a CSI firm, it is not surprising that there are policy challenges to meet the needs of the CSI and trading sectors. Smaller firms need to be properly counted and classified using standard definitions that allow measurements in the sectors to be understood.
- The government has rolled out a wide range of supportive plans and initiatives largely for the CSI sector (however categorized) and overseen by various agencies. It is important to ensure that coordination, in particular between DCSI, DAMC and APIC, is managed well and aligned with existing policy frameworks such as the 12th FYP, Economic Development Policy 2016, FDI Rules and Regulations 2019, FDI Policy 2019 and CSI Policy 2019.
- Trade matters to Bhutan’s smaller firms, as the section below on COVID-19 impacts makes clear. One way to improve the overall business climate and bring about greater certainty and lower risk in trading across borders is to renew active accession to the

\textsuperscript{79} National Statistics Bureau (2018). The Economic Census of Bhutan 2018.
WTO. When Bhutan originally launched accession talks at the WTO, it was an LDC. With LDC graduation looming in 2023, it changes the nature of the negotiations in Geneva. To simplify greatly, at the WTO, LDCs receive a wide range of benefits while having extremely limited obligations. As countries move to developing country status, the WTO still provides flexibility, but the application of the rules increases. Negotiations for accession are, therefore, likely to be more complex and cover a wider range of topics and commitments than the original discussions included. This is likely to call for stronger preparation by trade officials to ensure that the best possible outcomes can be achieved. It is also important to remember that LDC graduation is also likely to bring additional challenges for the business community that aims to increase exports, as the country will no longer be eligible for LDC preference programmes that currently provide zero tariffs for most products into most major markets. Having greater clarity on terms and conditions of trade that are not linked to LDC status is extremely important. As a WTO Member, Bhutan’s firms would be less at the mercy of sudden policy shifts by trading partners such as clearly discriminatory trade policies, the imposition of new tariffs, arbitrary application of standards, a wide range of non-tariff policies that can destroy business conditions overnight, and so forth.

- Services, including retail and wholesale enterprises, are the main drivers of the MSMEs sector, achieving consistent growth. However, most have remained in the micro classification due to the lack of growth opportunities and the tax-free benefit in rural areas. Strategic programmes should be put in place to support the services sector such as improving digital skills, upskilling, improved access to finance and certification.

- The DCSI, DAMC and APIC have small business development support units in place. It is recommended that one Business Development Support Unit be established within the Department of Cottage and Small Industry or the Bhutan Chamber of Commerce and Industries. The Bhutan Association of Women Entrepreneurs should be encouraged to work more closely with female CSI founders and business owners on developing business plans, preparing financial plans, providing assistance in understanding and accessing foreign markets, and creating better awareness of incentives and programmes already available. The goal is to reduce duplication of efforts across multiple agencies and make it easier for small businesses to find the support they need from a “one-stop shop.”

- The development of e-commerce platforms is recommended for the growth of CSIs and micro and small traders in the country. This should be done in partnership with experienced firms and perhaps spearheaded by the CSI Bank to develop e-payment systems to gain greater market access. To facilitate micro and small business participation in e-commerce platforms, the government should work with foreign service providers to create warehousing and cold-chain storage that can be shared across the MSME sector. This would allow more efficient consolidation of shipments, making Bhutan a more attractive potential partner for big e-commerce players that currently are less interested in the expense of managing logistics for what may be extremely small-sized, low-value shipments. Rather than attempt to create online platforms, it makes more sense to capitalize on existing providers and encourage Bhutan’s MSMEs to get onboard.

- Firms that create goods need assistance with product testing and skills development around standards requirements in potential foreign markets to ensure that Bhutan’s exports are as competitive as possible overseas. Hence, product testing and certification facilities not only need to be established or strengthened but will also have to be accredited with potential trading partners.

- A long-term recommendation to consider is the privatization of the industrial estates for more efficient management. The management of larger industrial estates can be leased out to private enterprises, whereas small CSI estate and start-up centres are recommended to be leased out in the long-term.
4.3 Access to finance

Small businesses cannot grow if they do not have access to financing. Bhutan’s financial sector has grown significantly since the first DTIS study in 2012 and has made substantial progress in terms of financial viability, profitability and competitiveness. Access to finance in Bhutan is improving due to more diverse collateralizable assets and the establishment of the Credit Information Bureau of Bhutan (CIB) in 2017, as well as deliberate government action. Currently, there are five banks, three insurance companies (two direct insurers and one re-insurer), three microfinance institutions, and other financial services providers such as the CIB, National Pension and Provident Fund (NPPF), Central Registry (CR), Royal Securities Exchange of Bhutan, Ltd (RSEB), Nubri Capital Pvt Ltd and the recently established CSI Bank in 2016. Figure 4.6 shows the pattern of financial institutional lending by sector.

Figure 4.6: Lending of financial institutions 2014–2019

![Graph showing lending of financial institutions 2014–2019](source: Statistical Yearbook, National Statistics Bureau 2014–2019)

However, access to finance is not equally distributed. In December 2017, as per the National Financial Inclusion Survey, 64.47 percent of adults in Bhutan had a savings account but only 16.08 percent had access to credit and 17.79 percent held a life insurance policy. From a total of 13,977 businesses surveyed for the first Economic Census of Bhutan 2018–2019, 35 percent underlined access to finance, rental payments and competition from the informal sector as challenges.

4.3.1 Credit options and investment protection

Informal lending is the most common source of credit for most CSIs in Bhutan. In addition, CSIs also prefer to apply for grants and support from the government such as from MoEA, DCSI, DAMC, APIC and the Druk Holdings and Investment BizAP programmes, which also offer grants for CSIs. Non-governmental organizations such as the Loden Foundation, Tarayana Foundation and Bhutanese Association of Women Entrepreneurs also extend credit to CSIs. The necessity of having collateral can be an issue for CSIs, especially in the services sector. There are no financial technology (fintech) options currently available for Bhutanese CSIs. Greater access to fintech may expand the pool of potential financing for firms. Other creative financing models are also likely to be languishing due to a lack of clear regulatory frameworks.

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4.3.2 MSME financing and credit: policies and initiatives

The Royal Monetary Authority (RMA) has initiated several policies since 2014 to facilitate access to finance, in particular to MSMEs. RMA instituted the Microloan Regulations in 2014 under the Royal Monetary Act 2010 for all microloan institutes. A microloan is defined as a loan to a client not exceeding BTN 500,000 and not provided for personal consumption. The RMA has licensed five microfinance banks since 2012.

In 2016, the RGoB established the Rural Enterprise Development Corporation Ltd, which was in turn converted in 2019 to the National CSI Development Bank as a non-deposit bank. In 2016, RMA implemented the Minimum Lending Rate. In 2017, the Bhutan Economic Forum for Innovation Transformation (BEFIT) was established as a national platform for dialogue and innovative solutions.

In 2017, RMA launched the Priority Sector Lending Guidelines to promote Cottage and Small Industries as a priority sector for targeted lending. In addition, the Ministry of Finance launched the Fiscal Incentives Act of Bhutan to provide fiscal incentives to business enterprises.

4.3.2.1 Priority Sector Lending for Cottage and Small Industries

The loans under Priority Sector Lending (PSL) are limited to a maximum of BTN 5 million for individuals and BTN 10 million for Integrated Activity and Groups and Cooperatives. Tenure for agriculture CSIs is 5 years and 15 years for non-agriculture CSIs. Despite the establishment of the PSL initiative, the Fiscal Incentives Act of 2017 and the CSI Bank, the number of CSIs borrowing from financial institutions has not increased.

Approximately 45 percent of applications submitted to the CSI Bank are approved. This relatively low approval rate could be due to the fact that PSL loans for CSIs require the same collateral (land) as other loans offered in the market and approval from the Credit Information Bureau.

The CSI and agriculture sectors accounted for only 14 percent and 5.33 percent, respectively, of total loans in December 2017.

4.3.2.2 CSI export finance

The DTIS 2012 reflected Bhutan’s attempt to position itself strategically in a number of high-value niche exports, like vegetables. CSIs still do not appear to have sufficient export financing available to take advantage of opportunities to expand into new markets. The Department of Agricultural Marketing and Cooperatives has been urging agricultural exporters during national auctions to avail of short-term loans. Despite these efforts, vegetable products made up only 3 percent of total exports.

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82 Financing is not the only obstacle; for vegetables, demonstrating adherence to food safety standards and product labeling may be contributing to low export figures to foreign markets. National Statistics Bureau, Bhutan Trade Statistics.
Box 4.2: Trade financing for exporters

Bhutan’s financial system has been expanding rapidly, with growth in lending and deposits exceeding 10 percent annually up to 2019, pre-COVID-19. Transactions linked to international trade have increased rapidly, mostly but not only from India. Trade finance consists mainly of letters of credit and is in part driven by foreign exchange regulation. Based on the RMA’s Foreign Exchange Regulation of 2018, for imports from third countries (countries other than India), remittances (payments) should be made by letters of credit, or by a SWIFT transfer through an authorized bank, in convertible currency.

The financial sector consists of five commercial banks and three non-banks (one pension fund and two insurance companies). Bhutan’s largest banks offer to arrange import letters of credit for their corporate customers, as well as export letters of credit if needed. To do so, banks require documents such as confirmed purchase order or pro forma invoices and the import licences issued by MOEA, as well as the property ownership documents for letters of credit pledged against collateral.

Advance payment of imported goods into Bhutan is authorized, under the conditions that the importer must provide documentary evidence of the cost of the goods, the agreed terms of payment, and a copy of the importer’s contract with the supplier, or any other evidence of the terms of payment. Remittance must be made directly to the suppliers. If the amount of the advance remittance exceeds US$10,000, a guarantee from a reputed international bank must be obtained.83

Documentary collection is not allowed in Bhutan (nor is there any plan to allow them), so it is not possible to use it instead of letters of credit.84

Many SMEs in Bhutan face difficulties in receiving payment facilities for their imports and exports.85

While Bhutanese banks have been able to increase the overall number of correspondent banks (that is, banks which would confirm letters of credit and other payments), this, coupled with new international financial transparency rules, led to a greater selectivity of clients (traders).

Efficient and affordable trade finance mechanisms are essential for Bhutan’s exporters. It has been reported for instance, that exporters of mineral ore face long delays in receiving payments from importers in neighbouring countries.86 The letter of credit system on which Bhutan and its trading partners (Bangladesh, Nepal and India) rely on is relatively burdensome and often results in exporters being paid well after the three days required in principle to settle the payment against the invoice. Delayed payments handicap exporters, who in turn spread and multiply payments to their transporters. Delays at each stage of the physical transportation and delivery process increase trade costs.

The letter of credit process, while effective in preventing malpractices, is document “heavy”. It relies on a relatively large number of documents due to Bhutan’s landlocked situation (hence cumulating shipping and land transport) and dependence on foreign ports. Bhutan’s traders are also dependent on the efficiency of trading partners’ banks in being paid. The lockdown related to the COVID-19 pandemic resulted in significant payment delays for traders because necessary documents could not be obtained, shipped and exchanged.

Bhutan should consider introducing additional trade finance solutions increasingly used by Bhutan’s neighbours and main trading partners such as factoring, credit insurance and trade loans. For example, on 30 June 2020, Bangladesh’s Central Bank expressly permitted international factoring, while providing comprehensive operational guidelines for it (including on costs and charges). Factoring (and reverse factoring) represents a cost-effective means for SMEs to obtain early cash payment against export receivables.

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83 Other regulatory procedures apply: importers are required to submit to the bank through whom the remittance was made a copy of the Import Declaration Form endorsed by the Customs authorities and to the Customs authorities, and upon goods’ clearance, a copy of the invoice attested by the bank through which the payment was made.

84 Documentary collections are document-based guarantees of payment but unlike letters of credit, the bank is not required to pay the seller if the buyer decides that it no longer wishes to buy. Since they provide a lower level of security of payment than that of letters of credit, the cost is lower.


Credit insurance is also a popular non-bank form of trade finance. About US$2 trillion of short-term credit insurance flows are being recorded each year, much from SME inter-company lending, according to the Berne Union, the association of export credit agencies and private insurers. The use of trade loans has also developed in many developing countries. Under this mechanism, banks extend lending (including working capital) to the extent that clients can display land, cash or building collateral. As a result, trade loans may not be the cheapest or most practical solution.

The adoption of new alternative trade finance solutions would require prior financial education of trading companies and banks, possibly in conjunction with Chambers of Commerce, the Central Bank, the Ministries concerned and perhaps relevant international agencies. For example, trade receivables and payables financing can help optimize SMEs’ scarce amounts of cash, but these relatively simple techniques must be understood by users. A maturity mismatch between receipts on their exports may lead the company concerned to be cash strapped. It is therefore important to educate banks and industries about the potential of short-term receivables and payable financing. The same goes for any other form of open account finance and credit insurance.

In order to improve the enabling environment for Bhutanese exporters through better trade finance services, authorities may i) review the letter of credit system with a view to reduce delays and the cost for trading firms; ii) assess the pros and cons of alternative forms of trade finance in Bhutan’s context against the use of letters of credit currently in use; iii) promote financial education in SMEs, and among banks on the setting up of letter of credit factoring, supply chain finance and credit insurance facilities; iv) promote education on the low-risk character of trade finance products, based on publicly available documentation by the International Chamber of Commerce; and v) undertake a survey among main industry associations to assess interest in alternative trade finance mechanisms.

Source: WTO (2020).

4.3.3 Alternative sources of finance

In 2017, the RSEB initiated a Small and Medium Enterprise Board to provide opportunities to SMEs to raise funds from the capital market. Recognizing the lack of access to long-term capital, the initiative was put in place to create a platform for MSMEs and start-up companies to raise long-term capital from institutional investors. Companies who wish to be listed on the SME Board must be incorporated under the Companies Act and the issuer must have a minimum paid-up capital of BTN 5 million.

In 2018, the RMA, in partnership with the MoEA, BCCI, Thimphu TechPark and the RSEB, launched the Jab-chor Platform to promote innovation, creativity and enterprise and bring together young entrepreneurs and angel investors.

Developing countries around the world are increasingly using alternative forms of finance, broadly lumped under the heading “financial technology (fintech).” Fintech providers can draw on pools of capital from global sources, which can allow companies that might not otherwise qualify or consider using financial instruments to find new pathways for financing.

Furthering the spread of innovative new financing and investment products also requires greater clarity in policy to confirm practices and policies that are allowed and/or prohibited or restricted in Bhutan. Improved frameworks and transparency may make Bhutan a more attractive destination for fintech and investors.

4.3.4 Policy recommendations for improving CSI financing

• One short-term policy recommendation for CSI financing is to make the existing private sector lending measures easier to avail for CSIs. First, promotional and awareness initiatives are required to provide appropriate information to CSIs. The majority of CSIs are not aware of the incentives and programmes available to them. Second, many firms will
also need financial literacy programmes and business support services. These could be built into skills development programming for CSIs.

- A medium-term policy recommendation is to provide guarantees for loans. CSIs are currently not utilizing many existing financial incentives because all loans (from any bank) require a non-movable asset (such as land) as collateral or a guarantor from the National Pension Fund. This has been a key deterrent to CSI financing. At present, DHI is the only organization that provides bank guarantees through their BizAP program.

- To promote exports and support CSIs, it is recommended that the government put in place export credits and guarantee initiatives to assist in financing of exports. This is particularly recommended for agricultural exporters.

- Firms need stronger support measures to facilitate equity investment. Although established in 2017 by the RSEB, the SME Board has not been able to garner sufficient interest. Stronger measures to facilitate equity investment through promotional programmes and awareness programmes is recommended.

- The BAOWE-Pelzhing Microfinance Institute and RENEW Microfinance are currently the only two financial institutes that offer loans intended to support women entrepreneurs. Although the bulk of micro and small business owners are women, there are currently no products designed specifically for women entrepreneurs.

- Short-term working capital facility for CSIs is recommended. An overall demand-driven study on financing requirements for CSIs in the medium-term is recommended.

- CSIs that make a journey to digital delivery will be stymied by problems with electronic payments. The CSI Bank or Bhutan Development Bank Ltd (BDBL) need to create products that allow e-payments and are interoperable with payment systems used by overseas buyers.

- The digital data derived from financial transactions processed can be a new source of information to assess the creditworthiness evaluation of CSI entrepreneurs, thereby strengthening their credit reporting and which could be used as electronic collateral for lending and leasing by the CSI Bank.

- Given the relatively small size of Bhutan’s banking sector, the government should begin to review potential regulations governing the operation of fintech providers so that foreign operators might fill some of the financing gaps currently affecting CSIs in Bhutan.

4.4 Cottage and Small Industries development

4.4.1 Main policies and initiatives implemented

4.4.1.1 Agriculture

While continuing to employ the majority of Bhutan’s workforce, the agricultural sector is not currently classified under CSI. The contribution of agriculture to gross domestic product (GDP) has dropped from 48.3 percent in the 1980s to 17.3 percent in 2017. However, the sector grew by 4.36 percent in the past five years. The agricultural sector remains an important pillar employing over 57 percent of the labour force. Most producers in the agricultural sector are not registered as CSIs but as producers, farmers groups or cooperatives with the Department of Agriculture Marketing and Cooperatives.

The Cooperatives Rules and Regulations of Bhutan 2010, implemented by DAMC, outlines the procedures and requirements for registering as cooperatives or farmers groups. The DAMC initiated the Agricultural Marketing Policy of Bhutan in 2013. A more comprehensive framework for the sector, the Renewable Natural Resources Marketing Policy of the Kingdom of Bhutan, was implemented by the Ministry of Agriculture and Forests (MoAF) in 2017.

policy objectives include strengthening marketing infrastructure, marketing finance, product value addition and marketing information.

In addition, the MoAF has actively focused on supporting natural resource-based and agricultural enterprises, through facilitating leases of state land, providing support for machinery purchases, tax incentives, export market studies, packaging, labelling and certification support as well as buy-back programmes. The 12th FYP highlights investment in agriculture as a key activity for the achievement of economic diversification; it is the 2nd National Key Result Area (NKRA) of the five-year plan. MoAF also created the Organic Flagship programme to identify eight selected agricultural products for exports and underline the need for value-chain and enterprise development.

4.4.1.2 Manufacturing

The share of the industrial sector to GDP rose from 11.5 percent in the 1980s to 40.57 percent in 2017, of which the contribution of the manufacturing sector was 8 percent. Only 11.72 percent (2,557) of the 21,813 registered CSIs were engaged in manufacturing and transformation industries. The manufacturing sector grew by 3.7 percent in the past five years.\textsuperscript{88} The most competitive manufacturing CSIs have been wood-based industries.

Manufacturing has seen a range of supportive policy initiatives put in place, including the CSI Policy, implemented in 2012 and revised in 2019, to support manufacturing businesses. In addition, the Economic Development Plan 2016, Priority Sector Lending Guidelines 2017 and the Fiscal Incentives Act of Bhutan 2017 are all measures put in place to support manufacturing enterprises in the country.

4.4.1.3 Construction

Of the total 21,813 CSIs in Bhutan, 1,869 or 8.38 percent, are contract enterprises. The construction sector has been shrinking gradually for the past five years.\textsuperscript{89} From 2017 to 2018, the construction sector in the country declined by 7.99 percent. The National Construction Industry Policy 2020 was implemented by the Ministry of Works and Human Settlements with the objective of professionalizing the construction sector, as well as promoting green growth and sustainable financing, strengthening institutional mechanisms and improving quality.

4.4.1.4 Services and tourism

The services sector, driven by tourism and, recently, the Information Communication Technology sectors (Information Technology/IT-enabled services) remain buoyant and contributed to 19.35 percent of the GDP. The services sector is the second largest business sector after trading. Services saw the most growth from 2018 to 2019 with over 1,743 (10.51 percent) new business establishments. Tourism and services are the largest foreign currency earners. The Tourism Policy stresses a high-value/low-impact policy. The 12th FYP highlights investment in tourism as a measure for economic diversification and acceleration of private sector growth and includes a separate flagship programme.

4.4.1.5 Textiles and handicrafts

Generally, the textile and handicrafts sector is not counted as CSI and remains classified in the informal sector, as the majority of the producers do not register for licensing their businesses or obtain licences. The Agency for the Promotion of Indigenous Crafts under the Ministry of Economic Affairs, established in 2011, has trained 1,756 persons, 250 total registered artisans


\textsuperscript{89} Economic Census of Bhutan 2018, National Statistics Bureau
and 23 cluster groups.\(^{90}\) There has not been a concise collection of handicraft and textile enterprise data. Handicrafts and textile stores are registered as retailers.

4.4.1.6 Traders (import/export firms)

Bhutan’s combined value of merchandise exports and imports is 74 percent of GDP. With 21,813 licensed businesses, the trading sector is the largest sector in business establishments. In the past five years, the wholesale and retail sector grew by 10.18 percent. The main export products are electricity, metal products, cement and agricultural products. India is Bhutan’s largest trade partner, accounting for more than 80 percent of its trade value.

4.4.2 CSI infrastructure and capacity-building

The Industrial Infrastructure Development Division (IIDD) under the Ministry of Economic Affairs is the focal office in charge of developing industrial infrastructure across the country. The IIDD does not have any restrictions on the size and activity of industrial estates. The IIDD plans to establish a start-up centre within their upcoming industrial estates. The Damdhum Industrial Estate, currently under construction in Samte, has been earmarked for CSIs. In addition to the developments by the IIDD, the DSCI is also constructing separate CSI Industrial Estates (Table 4.4). The Transitional Trade Support Facility 2019 is a commitment by the Government of India of INR 4,000 million outside the 12\(^{th}\) FYP to promote bilateral trade and strengthen economic linkages. One of its goals is trade infrastructure development through the construction of dry ports, warehousing units and cold storage facilities across 10 dzongkhags.

Table 4.4: Industrial estates, techparks, incubation centres and start-up centres

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Size</th>
<th>Industry Type/ Size</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jigmeling Industrial Estate</td>
<td>Sarpang (South-Central)</td>
<td>729 acres</td>
<td>Any</td>
<td>Under construction</td>
</tr>
<tr>
<td>Dhamdum Industrial Estate</td>
<td>Samtse (South-West)</td>
<td>349.07 acres</td>
<td>Green and non-polluting</td>
<td>Under construction</td>
</tr>
<tr>
<td>Motanga Industrial Estate</td>
<td>S./Jongkhar (South-East)</td>
<td>155.56 acres</td>
<td>Any</td>
<td>Under construction</td>
</tr>
<tr>
<td>Bondeyma Industrial Estate</td>
<td>Mongar (East)</td>
<td>110.35 acres</td>
<td>Any</td>
<td>Under construction</td>
</tr>
<tr>
<td>Pasakha Industrial Estate</td>
<td>Chukha (South-West)</td>
<td>188 acres</td>
<td>Any</td>
<td>Operational</td>
</tr>
<tr>
<td>Bjemina Industrial Estate</td>
<td>Thimphu</td>
<td>32 acres</td>
<td>Non-polluting</td>
<td>Operational</td>
</tr>
<tr>
<td>Thimphu TechPark 1</td>
<td>Thimphu</td>
<td>18 acres with Lower Ground Fl + Ground Fl + 2 Upper Floors</td>
<td>ICT, business incubators, shared technology, data centre</td>
<td>Operational</td>
</tr>
<tr>
<td>Thimphu TechPark 2</td>
<td>Thimphu</td>
<td>20,000 sq. ft</td>
<td>ICT, business incubators, shared technology, data centre</td>
<td>Operational</td>
</tr>
<tr>
<td>Start-up Centre</td>
<td>Thimphu</td>
<td>30 start-ups</td>
<td>Any</td>
<td>Operational</td>
</tr>
<tr>
<td>Start-up Centre</td>
<td>Monger</td>
<td>30 to 50 start-ups</td>
<td>Any</td>
<td>Under construction</td>
</tr>
<tr>
<td>Start-up Centre</td>
<td>Samste</td>
<td>30 to 50 start-ups</td>
<td>Any</td>
<td>Under construction</td>
</tr>
<tr>
<td>CSI Estate</td>
<td>Tsirang</td>
<td>12 CSI</td>
<td>Any</td>
<td>Under construction</td>
</tr>
</tbody>
</table>

Source: Information gathered from IIDD and DCSI, MoEA.

\(^{90}\) Agency for the Promotion of Indigenous Products
4.4.2.1 CSI and investment promotion agency

There is currently no investment promotion agency in Bhutan. With the Foreign Direct Investment Division under the DoI, MoEA acts as an investment promotion agency. The FDI Division finalized the Bhutan Investment Strategy in April 2020 which has a proposal to establish an Investment Promotion Agency.

4.4.2.2 Department of Cottage and Small Industry

The Department of Cottage and Small Industry (DCSI), established in 2010, is the focal point for the promotion and development of the CSI sector in Bhutan. The Cottage and Small Industry Policy 2019 sets the overall policy framework and roadmap for CSI development in Bhutan for the period 2019–2030. The new FDI policy 2019 opens up the CSI space for foreign investments in small-scale businesses in selected activities only.

4.4.2.3 Empowering women entrepreneurs

The CSI sector, as of 15 June 2019, comprised 22,064 economic operators of which over 60 percent were women entrepreneurs. The bulk of CSIs operate in the services sector, particularly in the retail services subsector. There are no specific policies or initiatives in place to support women entrepreneurs. However, the DCSI recognizes best entrepreneurs annually with a certificate and cash prize through the Bhutan Enterprise Award instituted in 2013; one category is Woman Entrepreneur of the Year.

4.4.2.4 Private sector trade policy awareness

With the exception of the members of the Bhutan Exporters Association (BEA) and the Association of Bhutanese Industries (ABI), private sector awareness of trade policy is limited. In particular, MSMEs lack awareness of how trade arrangements and agreements can benefit them. It is important to build awareness and educate MSMEs on the trade agreements and other measures in place that can support them.

4.4.2.5 Role of business and trade organizations – formal and informal associations

The Bhutan Chamber of Commerce and Industry (BCCI) is the oldest business organization in Bhutan, established in 1980. Since then, several sector associations have been formed including: Association of Bhutanese Tour Operators, ABI, Bhutan ICT and Training Association, Association of Wood-Based Industries, Bhutan Film Association, Automobiles Services Association of Bhutan, Hotel and Restaurant Association of Bhutan, Association of Bhutan Cable Operators, and Handicrafts Association of Bhutan. These sector associations formed a Committee of Sector Associations and signed an MoU in 2018 with the BCCI to work together for stronger inclusion, representation, interventions and service delivery.

4.4.2.6 Bhutan Chamber of Commerce and Industry

The Bhutan Chamber of Commerce and Industry (BCCI) is the apex body of private sector representation in the country. It manages the Private Sector Development Committee launched by the RGoB in 2019. In 2018, the BCCI conducted workshops on familiarization with the MSMEs Development Loan scheme. It also offers Human Resource Development training programmes in skills such as tailoring, baking and rafting. In the past seven years, the BCCI has streamlined its activities and initiatives in supporting CSIs.
4.4.2.7 Bhutan Exporters Association

The Bhutan Exporters Association was established in 2003 and has a total of 150 members. The association facilitates the exports of minerals, spices and herbs, apples and oranges to India and Bangladesh.

4.4.2.8 Bhutan Association of Women Entrepreneurs (BAOWE)

The Bhutan Association of Women Entrepreneurs (BAOWE) was founded in 2010 to reach out to marginalized women, unorganized sectors and unemployed youth. The association identifies livelihood opportunities and provides skills training for its members on income-earning activities. The BAOWE has initiated research, branding, packaging and marketing activities, along with export market identification through networking of regional women entrepreneurs. It also has a development of women-run and women-owned grassroots cluster cooperatives.

4.4.3 The role of digitalization in empowering CSIs

A move to digital trade for CSIs will enable smaller firms to grow and become more competitive. Data produced by digitalization will enable businesses to connect to customers, create efficiencies, reduce costs and improve services. The Digital Drukyul Flagship program, under the 12th FYP, aims to improve the Ease of Starting Business indicator of the World Bank’s Doing Business report by creating online platforms to process documents and clearances. In addition, the programme also aims to process import and export clearances online.

As of December 2019, Internet and mobile penetration was 110.4 percent and 98.3 percent, respectively. The RGoB has initiated the Digital Drukyul programme to focus on public services, including education and health. However, the establishment of e-commerce platforms and the use of digital technology and automation across the private sector and, in particular, in MSMEs remains limited.

4.4.4 Gaps in development policies

- The lack of formal registration of the majority of micro and small producers in the country, has limited the ability of CSIs to take advantage of public programmes and initiatives.
- As noted earlier, without a complete picture of the CSI sector, including many agricultural producers, service providers, traders, and textiles and handicraft enterprises, it is difficult to prepare an effective policy framework to support their needs.
- There is very little focus on trade in services and traders, although they make up the largest growing subsectors of MSMEs in the country.
- Women form a key demographic within the CSI sector as well as the trading sector in Bhutan, yet there appears to be limited efforts to think strategically about how to better support female business owners and operators as they try to grow their businesses.
- The digital economy will be a key part of CSI competitiveness in the future, so it will be important to ensure a broad base of digital skills across the population and a supportive infrastructure to encourage the digital future, including issues like hard infrastructure and e-payments.
Box 4.3: Impact of the COVID-19 crisis on MSMEs

MSMEs make up 95 percent of business enterprises in Bhutan. Over 49 percent of MSME businesses are in the services sector. The COVID-19 pandemic has left a devastating impact on the sector, evident in the 23,000 individuals who received income support through His Majesty’s Druk Gyalpo Relief Fund between April and June 2020. The applicants were all from the private sector who had lost their livelihoods and sources of income. As most businesses were closed due to the lockdown, micro and small enterprises in the services sector are the worst casualty of the pandemic.

Since most MSMEs do not access credit, as loans are given against property collateral, the lack of a financial buffer has adversely affected their sustainability during this crisis.

Recognizing the impact of COVID-19, DCSI recommended nine CSIs for working capital support under the Term-Based Soft Working Capital Loans introduced as an interim measure to counteract the impact of COVID-19.

In addition, the Bhutan Chamber of Commerce and Industry established a Private Sector COVID-19 Task Force representing the private sector to negotiate with the RGoB as well as financial institutions. The Private Sector Task Force proposed a one-year loan deferment to the Financial Institutions Association of Bhutan as well as the Royal Monetary Fund. In addition, it recommended a mix of monetary, fiscal and policy measures to the government including reduced interest rates and a reduction in taxes. These are currently under consideration by the Royal Government of Bhutan.

4.5 Conclusion

The small business sector, however defined, is a critical part of Bhutan’s overall economy. While the government has put in place a wide variety of support mechanisms to encourage the growth of CSIs, the impact of many existing policies has not reached their full potential. CSIs continue to struggle to grow and expand, with limited overseas market penetration. The imposition of COVID-19 and related business disruptions have had an additionally devastating impact on many smaller companies.

Changing this situation requires a range of interventions and policy decisions across at least three key areas:
- Business and investment climate changes to become more favourable for the CSI sector.
- Efforts to address a range of financing gaps.
- Efforts to support development for CSIs, particularly for disadvantaged groups, women, agriculture, handicrafts and textiles.

This report and the associated recommendations in this chapter and across the book provide a welcome opportunity for reflection and readjustment in policies to help unleash greater economic growth and prosperity for companies of all sizes in the future.
References


5.1 Introduction

Quality Infrastructure (QI) is a system consisting of organizations, both public and private, along with policies, relevant legal and regulatory frameworks and practices essential to support and enhance the quality, safety and environmental reliability of goods, services and processes. This definition was agreed upon by 10 international organizations forming the International Network on Quality Infrastructure (INetQI). The pillars of QI are standardization, metrology (scientific, industrial and legal), conformity assessment services (testing, inspection and product/system certification), accreditation and regulatory framework, all of which are firmly connected.

Guided by the development philosophy of Gross National Happiness (GNH), the objective of Bhutan’s 12th Five Year Plan has been defined as “just, harmonious, and sustainable society through enhanced decentralization.” The National Key Result Area 2 (NKRA-2), “Economic diversification”, aims to develop an inclusive, sustainable equitable economy with decent livelihood opportunities for everyone through accelerated private sector growth and investments in agriculture, tourism, cottage and small industries (CSIs), mining and allied hydropower industries.

An efficient and effective QI system is a critical element towards the achievement of the NKRA-2 for enhancing competitiveness, new market access, innovation, productivity and the protection of consumers’ health and safety. Further, as Bhutan joins the global supply chain for trade of goods and services, creating an efficient transport and logistics system will be an important feature for greater exports and safer imports. The landlocked geographical conditions amplify the need for coherent and smooth trade facilitation. Trade facilitation, a driver, cannot function in isolation without a well-established and implemented QI system, an enabler.

Continuous enhancement of QI systems and institutions is essential and a robust national QI system is vital for facilitating trade, gaining market access (both domestic and foreign markets) and meeting international trading requirements. Improved QI systems can also help align trade activities with Bhutan’s balanced sustainable environmental and socio-economic development.

This chapter reviews the progress made on QI with reference to the baseline information reflected in the DTIS 2012. It contains insights into the elements, needs and institutional gaps of QI, the status of QI institutions in Bhutan, and critical export and import issues related to Sanitary and Phytosanitary (SPS) and technical barriers to trade (TBT). Towards the end, the chapter also provides a matrix of action.

5.2 Quality Infrastructure and its significance

As described above, QI is a system of organizations, policies, relevant legal and regulatory frameworks and practices to support and enhance the quality, safety and environmental reliability of goods, services and processes. Its connected pillars of QI are standardization, metrology (scientific, industrial and legal), conformity assessment services (testing, inspection and product/system certification), accreditation and regulatory framework.
5.2.1 Standardization

A standard refers to a document, rules, guidelines or characteristics established by consensus and approved by a recognized body aimed at the achievement of the optimum degree of order in a given context. Standards and their use in technical regulations on products, services and processes play a significant role in sustainable development and trade facilitation through the promotion of safety, quality and inter-operability.

5.2.2 Metrology

Metrology is the science of measurement, which covers definitions of units of measurements, realization of standards of units of measurements, development of measuring instruments and the field of implementation, and establishing an unbroken chain of traceability of measuring results. Metrology is represented in all areas of human life and is central to the manufacturers, suppliers and customers of goods and services. It also serves to maintain a system of accurate measurement which is necessary to support the production of quality goods and provision of services. Each country needs to provide uniformity of measurements through metrological regulation, realization of national standards, measuring instruments, patterns of evaluation, examination of measuring instruments and reference materials.

5.2.3 Conformity assessment

Conformity assessment is a demonstration that specified requirements relating to a product, process, system, person or body are fulfilled. It is specific to the object being assessed—it can be a product, a process or a management system—and to the body undertaking the assessment. Conformity assessment procedures, such as testing, inspection and certification, offer assurance that products fulfil the requirements specified in regulations and standards. Conformity assessment helps to ensure building trust and confidence for sustainable development and trade. The government and regulators benefit from conformity assessment, which gives them a means to enforce national health, safety and environmental legislation and achieve public policy goals.

5.2.4 Accreditation

Accreditation is defined as third-party attestation to convey formal recognition that a body is competent to carry out specific conformity assessment tasks. Conformity Assessment Bodies (CABs) include, but are not limited to, laboratories, medical laboratories, testing laboratories, inspection bodies and bodies that certify management systems, products and persons. Accreditation ensures that they have the competence to verify that products, services, persons and the like comply with relevant standards. A robust system of accreditation will ensure the competence and credibility of Conformity Assessment Bodies. It will support the improvement of the quality of products sold domestically to consumers and the free movement of products within a region or globally through reduced technical barriers to trade and mutual recognition of conformity assessment certificates. It will support an improved market for buyers and sellers and access to regional and international markets.
5.3 Significance of Quality Infrastructure in Bhutan’s Trade

For a country that has a trade deficit of over 80 percent, being able to efficiently export any amount of goods matters significantly. As Bhutan brands itself as a country with organic and niche products, the quality and safety of the products as well as the reliability and consistency of logistics systems must be efficiently developed and implemented. At the same time, as Bhutanese consumers rely heavily on imported products, long-term health issues due to unsafe food products cannot be measured in monetary terms. Therefore, Bhutan requires, for any trade facilitation, particularly export, more than ever, establishing Mutual Recognition Agreements (MRAs) with importing countries for which an effective and efficient Quality Infrastructure system needs to be strengthened.

Bhutan is an emerging economy and has a mix of organized and unorganized players in the agriculture, manufacturing and service sectors. Small and medium enterprises (SMEs, referred to as Cottage and Small Industries (CSIs) in Bhutan) have the largest employment share and have exponentially increased the types of economic activities in the last decade. Although electricity as an individual product constitutes the largest export share, the share of other products combined has, on average, made up 68 percent of Bhutan’s trade in the last decade. The share has increased from 67 percent in 2011 to 75 percent in 2019.

India continues to dominate as the largest export market for Bhutan. While electricity is exported exclusively to India, for all other products, India continues to dominate at an average of 81 percent. However, two trends are distinct from the export data: first, the export share of countries other than India (COTI) has been increasing (9.3 percent in 2012 to 30 percent in 2018); second, the export contribution from other products other than electricity has been increasing as well (63 percent in 2016 to 75 percent in 2019). These trends necessitate the need for a robust QI for goods and commodities from Bhutan in the global supply chain.

In terms of products, ferro-alloys account for 48.8 percent of the exports, followed by dolomite (13 percent) and cement (10.4 percent). Although only potatoes and cardamom make it into the top commodities constituting 6.9 percent and 4.5 percent of exports, respectively, these commodities are perishable in nature and affect a large number of actors along the value chain (Figure 5.1). Thus, food products should not be ignored based only on market share.

Figure 5.1: Export product details

Although several other agricultural and forest-based products (such as bottled water, manufactured food, mandarin oranges and particle boards) are not featured in the list of top exports, discussions in stakeholder meetings revealed that exporting these commodities has remained a serious challenge, owing to the absence of strong and functional QI for these products.
Bhutan’s major imports are petroleum (30.5 percent) followed by equipment and machinery for hydropower and construction, iron ore as raw materials for ferro-alloys (11.7 percent) and gasoline (9.4 percent). Imports of around BTN 7,600 million of food items were recorded in 2018 of which 96.2 percent is from India (Figure 5.2).

Ensuring macroeconomic stability and enhancing economic diversity and productive capacities have been identified as priorities to create a sustainable society in the 12th Five Year Plan of Bhutan. As a result, there is an increasing need to discuss, compare and improve the pillars of Quality Infrastructure in the framework of sustainable development, economic efficiency, facilitation of trade, and market access for goods and services. The Cottage and Small Industry Policy 2019 has also taken cognizance of the significance of QI and the government has committed to facilitate industries to improve the quality of products and services through promotion of standards and facilitation of conformity assessment services including calibration.

5.4 Constraints faced by Bhutanese exporters: SPS measures and technical barriers to trade

Non-tariff measures (NTMs) have been identified as one of the barriers to global trade. Although the disciplines under multilateralism have been successful in reducing global average tariff rates, non-tariff measures have emerged as one of the main obstacles to trade, which unlike regular tariffs increase trade costs, as most of the costs involved compliance with procedural bottlenecks. Thus, the rapid increase of NTMs can put exporting countries at a major disadvantage, as most will not have the technology or the production capacity to comply with these standards. Bhutan's exports can be affected by the imposition of Sanitary and Phytosanitary (SPS) measures and technical barriers to trade (TBT) on food and agricultural goods, an area where Bhutan has a comparative advantage.

Since the majority of Bhutan's foreign trade is directed towards India and Bangladesh, analysing their NTM requirements for some of the top traded items will help assess the NTMs’ impact on Bhutan. The World Integrated Trade Solution (WITS) database maintains a record of applicability of NTMs for many countries and has data available on India for 2017. The relevant information is as follows:
• There are 1,382 products under TBT and 629 products under SPS in India.

• Most of the SPS measures are applied to vegetables and other food products, while TBT measures are applied to textile, clothing and vegetables. These numbers do not reflect the total number of SPS and TBT measures used by India. Notification requirements of SPS and TBT are not mandatory, if they are based on international standards. Thus, for Bangladesh, it is possible that TBT (Figure 5.3) and SPS (Figure 5.4) measures have been applied to some of its imports but not reported to the WTO. It is this lack of information on requirements that pose additional problems to exporters.

![Figure 5.3: TBT measures applied on sectors by India](image1)

![Figure 5.4: SPS measures applied on sectors by India](image2)

Source: ESCAP, calculated from the WITS database on NTMs.

Conceptually, non-tariff measures are perceived to be restricting trade. Their existence creates multiple challenges to exporters as well as domestic producers. The costs of compliance are additional costs that exporters need to bear to be able to comply with SPS and TBT measures imposed by the importing country.

Many of Bhutan’s top exports cover the products to which India applies SPS and TBT measures. For exports destined to India:

• Exports from Bhutan are required to pass through notified exit and entry points in India and Bangladesh; SPS/TBT-related inspection and testing requirements are a major obstacle for entry-related restrictions.

• Bhutanese exporters, while exporting food and agricultural products, need to produce a certificate from a recognized laboratory in India under the Food Safety and Standard Authority of India (FSSAI), which increases costs and delays.

• Products exported to India, which fall under the mandatory certification scheme of the Bureau of Indian Standards (BIS), have to apply for BIS certification, which is time consuming, burdensome and incurs more costs.
For exports destined to Bangladesh, all fruits are subjected to mandatory formalin-free tests while other edible and processed food items are required to submit certification for radioactive levels, which becomes cumbersome, causing delays in exports.

This indicates that Bhutan’s exporters are able to comply with these NTMs. This is confirmed by officials of the Agriculture Marketing Division of the Department of Agriculture and Cooperatives. It is imperative that its laboratories and testing facilities are developed so agricultural products can be exported to developed countries. Thus, Bhutan needs to seek targeted support from its bilateral donors (countries as well as financial institutions) by investing in the establishment of laboratories, building the knowledge of technicians and recognizing these laboratories for certifications of conformity with standards and technical regulations. The RGoB can also consider allowing some of the internationally accredited agencies to set up their testing facilities in Bhutan with 100 percent foreign direct investment on a build, operate and toll (BOT) basis.

Bhutan faces several constraints in meeting most of the technical regulations as well as voluntary standards imposed by importers. These include inadequate infrastructure and technical facilities in the National Food Testing Laboratory; limitations in analysing the residue limits in food items; and lack of mutual recognition of test procedures. The Bhutan of Agriculture and Food Regulatory Authority (BAFRA) needs to secure accreditation from similar institutes in India as all food items exported to the country require a Fit for Human Consumption certificate issued in India. In Bangladesh, individual certification is required for each test parameter, making the whole process very laborious. Certificates of origin must also be acquired before food and agricultural products can be exported to Bangladesh.

In case of TBT measures, the biggest issue that Bhutan faces is the lack of a dedicated body to monitor and enforce non-food item standards (Chapter 5). Other constraints include capacity limitations in ensuring the proper execution of industry mandates and para-tariff charges imposed in Bangladesh.

All these SPS and TBT requirements add a considerable time lag and further add to resources constraint in testing facilities. As with most developing countries, NTMs also present a significant challenge for Bhutan’s exports. With rapid economic growth across the globe and increasing standards of living, the growth of NTMs is likely to continue with more stringent regulatory standards imposed in the future.

To ensure that this does not prohibit Bhutan from exporting at full potential, Bhutan must seek continued technical assistance for capacity-building and establishment of more sophisticated testing labs. Cooperation between institutes that oversee product quality testing and issue certifications will help ease the process. Steps can also be initiated for digitalization, so that associated procedural obstacles are addressed by exporters, rather than needing to take samples for testing in the laboratories of the importing countries.

A closer look at the discussions and interviews with BAFRA officials reveal that there are gaps between the current situation in Bhutan and international best practice in terms of legislation, institutional frameworks and infrastructure related to SPS and TBT. Broadly, these include legislative frameworks with overlapping roles and responsibilities of different agencies; lack of SPS standards for many consumer items; lack of recognition of Bhutan certification by importing countries; insufficient infrastructure related to SPS and TBT, including laboratories and equipment; and limited technical capacity and human resources.
Organic produce from Bhutan is a particular focus. The 12th FYP has given importance to the Organic Agriculture Flagship Programme, which aims to commercialize organic production. In the 12th FYP, the Royal Government of Bhutan decided to pursue organic agriculture as a Flagship Programme to support and expand the sector. It aims to build an enabling environment, commercialize organic production for economic growth and create employment opportunities. Some commodities identified for the Flagship Programme (as per the blueprint) are shown in Table 5.1:

Table 5.1: Organic commodities identified for the Flagship Programme (12th FYP)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Commodities for Export Market</th>
<th>Commodities for Domestic Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>Buckwheat</td>
<td>Asparagus</td>
</tr>
<tr>
<td></td>
<td>Quinoa</td>
<td>Beans</td>
</tr>
<tr>
<td></td>
<td>Ginger</td>
<td>Cauliflower</td>
</tr>
<tr>
<td></td>
<td>Turmeric</td>
<td>Chili</td>
</tr>
<tr>
<td></td>
<td>Cardamom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mushroom</td>
<td></td>
</tr>
<tr>
<td>Livestock</td>
<td>Trout</td>
<td></td>
</tr>
<tr>
<td>NWEP</td>
<td>Lemongrass</td>
<td></td>
</tr>
</tbody>
</table>


The response is equally positive from the demand side. The preliminary report on the 21st Century Economic Roadmap of Bhutan calls for an increase in exports of biological and organic products, particularly to India, at a premium price.

The National Organic Programme under the Ministry of Agriculture and Forests is mandated to take this forward, but they do not have instruments and mechanisms in terms of QI. In this regard, BAFRA, as the current organic certifier-designate, is preparing the standard operating procedures and process for organic certification. However, BAFRA lacks the qualified human resources for testing capabilities. Organic certification is a challenging task and requires a qualified workforce backed by accredited laboratory facilities that meet international standards. Given the aspirations articulated in the 12th FYP, the preliminary report on the 21st Century Economic Roadmap, and market demand, this vision demands a serious reappraisal. The review must take Sanitary and Phytosanitary measures and technical barriers to trade into serious consideration to achieve the outcome of the aforementioned vision of Bhutan becoming organic by 2020.

To ensure that the Bhutan Organic Certification System is ISO 17065 compliant, BAFRA has undertaken the following activities:

- Submission of application to the National Accreditation Board of Certification Bodies (NABCB)
- Completion of activities that do not involve on-site audit
  - Preparation of the necessary documentation
  - Passing the offsite document review conducted by NABCB
  - Evaluation of the farms (including registration, preliminary inspection and audit)
- Preparation for the NABCB onsite assessment, which remains pending due to the pandemic.
The NABCB assessor’s onsite assessment, BAFRA’s closure and/or fulfilment of non-conformities identified during the audit and the awarding of accreditation certification are pending due to the pandemic.

Further, BAFRA as the only organic third-party certification body in Bhutan is faced with challenges and constraints in fulfilling the demands of organic operators, who need to comply with different requirements of various trading partners and countries. Each country has their own sets of regulations and procedures to recognize and allow the importation of organic foods. Addressing different country-specific certification requirements by a single certification body can be very challenging. There is the need to explore and encourage other certification bodies, both national and international, to facilitate Bhutanese organic operators.

## 5.5 Evolution of Quality Infrastructure in Bhutan since 2012

Quality Infrastructure in Bhutan has undergone considerable development since 2012. The review of the Action Matrix, Diagnostic Trade Integration Study (DTIS) 2012 on standards and Quality Infrastructure is detailed in Table 5.2.

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Action</th>
<th>Status</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop national capacity to certify organic products for export</td>
<td>Obtain accreditation of BAFRA as national organics certifying body by internationally recognized accreditation organization (i.e. NABCB)</td>
<td>Partially completed</td>
<td>BAFRA obtained certification for three products (packaged drinking water, packaged natural mineral water and fruit juices) only. BAFRA as a certifying body for organic products is currently being assessed by the NABCB. The accreditation process is supported by the EU RDCCRP. Other certification bodies are yet to be identified for organic products exports to Thailand or EU markets.</td>
</tr>
<tr>
<td></td>
<td>Extend contract of international long-term expert (provided by National Organics Programme to BAFRA) to assist implementation of its certification role</td>
<td>Partially completed</td>
<td>BAFRA engaged expert services and developed a third-party certification system. BAFRA has introduced a product certification scheme for food products; organic products (herbal tea); and Bhutan Good Agricultural Practice (GAP) products. The organic produce/export certification is under process.</td>
</tr>
<tr>
<td>Develop national capacity to identify, evaluate and manage biosecurity risks and emergency planning</td>
<td>Ensure that BAFRA has sufficient senior professional staff to fulfil its mandate. Appoint biosecurity experts for a two-year term to train BAFRA staff in biosecurity risk analysis and emergency planning, to facilitate preparation of the Biosecurity Act, etc. Provide additional screening equipment for cargo and passengers’ luggage at border entry points.</td>
<td>Partially completed</td>
<td>Qualified human resources are still a challenge for BAFRA. BAFRA did not hire a biosecurity expert, no training on risk analysis conducted and no Biosecurity Act in place.</td>
</tr>
<tr>
<td>Strengthen analytical capabilities for food safety</td>
<td>Provide adequate scientific staff to maintain the National Food Testing Laboratory’s international accreditation.</td>
<td>Partially completed</td>
<td>Inadequate qualified personnel and equipment remain a challenge.</td>
</tr>
<tr>
<td>Strengthen plant pest/disease surveillance and identification</td>
<td>Upgrading the National Plant Reference Laboratory.</td>
<td>Completed</td>
<td>Pest surveillance section newly created in National Plant Protection Centre (NPPC), responsible for the timely collection and availability of pests/diseases/weeds information to assure the necessary preparedness for providing prompt plant protection services. Web-based e-Pest Surveillance System has been developed and maintained by the section to compile and share real-time information on pests of agricultural crops in Bhutan.</td>
</tr>
<tr>
<td>Strengthen Standard, Metrology, Testing and Quality (SMTQ) capability</td>
<td>Institutional development of the Bhutan Standards Bureau, including strategic planning, subordinate legislation, quality manuals, Internet access, etc.</td>
<td>Completed</td>
<td>Micro, Small and Medium Enterprise Sector Development Project (ADB) aimed to develop national organization and infrastructure for standards development, certification systems and testing for ensuring quality of goods and services has provided some capacity development activities.</td>
</tr>
</tbody>
</table>
Box 5.1: Summary of main achievements and setbacks since DTIS 2012

The DTIS 2012, under the Section of Standards and Quality Infrastructure, highlighted six objectives and provided recommendations. Overall, QI institutions, in particular, the Bhutan Standards Bureau (BSB) and the Bhutan Agriculture and Food Regulatory Authority (BAFRA) have made considerable progress over the period.

Both the National Food Testing Laboratory of BAFRA and the Products Testing Laboratory of the Bhutan Standards Bureau have obtained the ISO 17025 accreditation. BAFRA is accredited to certify three products: packaged drinking water, packaged natural mineral water and fruit juices (chemical and biological tests) and BSB is accredited to certify cement, bitumen emulsion and thermo mechanically treated (TMT) rebars.

However, no agency has organics certification accreditation as recommended by the DTIS 2012. In terms of legal and regulatory frameworks, BAFRA in particular, has put in place six new regulations and one piece of legislation, while BSB has introduced licensing regulation and the rules for product certification.

**BAFRA**
- Bhutan Biosafety Act, 2015
- Food Rules and Regulations of Bhutan, 2017
- Livestock Rules and Regulations of Bhutan, 2017
- Plant Quarantine Rules and Regulations of Bhutan, 2018
- Seed Rules and Regulations of Bhutan, 2018
- Biosafety Rules and Regulations, 2018
- Pesticides Rules and Regulations of Bhutan, 2019

**BSB**
- Licensing Regulation, 2015
- The Revised Rules Governing Product Certification, 2016

**DRA**
- Narcotic Drugs, Psychotropic Substances and Substance Abuse Act of Bhutan, 2015

The Pest Surveillance Section, newly created in the National Plant Protection Centre, is responsible for the timely collection and availability of information on pests, diseases and weeds to determine
the necessary preparedness for providing prompt plant protection services. The web-based e-Pest Surveillance System has been developed and maintained by the Section to compile and share real-time information on pests of agricultural crops in Bhutan.

The two agencies (BAFRA and BSB) have received a good number of capacity development opportunities, a large part of which was supported by the ADB and UNIDO. However, adequate human capital is still a challenge for both agencies. The lack of consensus between the two agencies with regard to agriculture and food items has resulted in BSB, the apex standards body of the country, being without any technical experts in that field. This has ultimately compromised the development of an adequate number of relevant standards.

Further, since 2012, Bhutan has undertaken the following:
- Adopted several acts, rules and regulations.
- Established the Better Business Council (BBC), the Bhutan Economic Forum for Innovation Transformation (BEFIT) and the Agency for the Promotion of Indigenous Crafts and the Bhutan Association of Women Entrepreneurs.
- Become party to international QI agencies and other relevant agencies pushing for customs modernization (eCustoms Management System) and mechanisms to improve the ease of doing business and facilitate trade: National Single Window (NSW) and Trade Information Portal (TIP).

However, the country’s inadequate and weak QI is posing great hurdles in trade costs and time reduction resulting in an inefficient and unproductive environment of doing business.

The Bhutan Standards Bureau has drafted and finalized the National Quality Policy and submitted it to the RGoB for endorsement. The policy has been presented to the Honourable Members of the Gross National Happiness Commission. The main objective of the policy is to foster and promote National Quality Infrastructure (NQI) as a means of advancing the national economy, benefiting the health, safety and welfare of the public, assisting and protecting consumers, protecting our national environment, promoting industrial efficiency and development, and facilitating domestic and international trade. The policy seeks to harmonize relevant policies, laws and regulations and provide clarity of roles and responsibilities of the governance on Quality Infrastructure systems and also strengthen the efficiency and reliability of QI institutions by establishing transparent structures and processes.

5.6 Quality Infrastructure in Bhutan

5.6.1 Role of the BSB Standardization Division

The Bhutan Standards Bureau (BSB), the National Standards Body of Bhutan, was established as an autonomous organization in 2010 after the enactment of the Bhutan Standards Act 2010 to foster and promote standardization activities as a means to advance the national economy, benefit health and safety, and facilitate domestic and international trade. The BSB also functions as the Technical Barriers to Trade (TBT) enquiry point. The Standardization Division is responsible for developing and publishing national standards and also facilitating their implementation to ensure the promotion of Quality Infrastructure. The standards are formulated following the best practices of the International Organization for Standardization (ISO).

The BSB has identified eight priority areas for standardization: engineering (civil and mechanical); food and agriculture; electrical and electronics; basic and management systems; pharmaceuticals and traditional medicines; textiles; timber and wood products; and graphical symbols. A total of 10 technical committees in different areas have been established to carry out standardization work. The BSB has published a total of 245 Bhutan National Standards (BTS) up to 2019. The list of local standards published is given in Table 5.3.
Standards support domestic markets to operate effectively and increase competitiveness and they provide an excellent source of technology transfer to developing countries. They also play a vital role in the protection of consumers and the environment. The WTO Agreement on TBT also recognizes the contribution that international standardization can make to technology transfer and the role of international standards and conformity assessment systems in improving the efficiency of production and in facilitating international trade.

The RGoB has also placed importance on standards for the Department of Cottage and Small Industry (DCSI) flagship programme. Under the programme, at least 20 products have been earmarked for standards development (agricultural and manufactured products) within a two-year period. Standards formulation activities are underway in the relevant technical committees for these products and BSB has initiated the standards formulation works with 10 standards targeted in the fiscal year 2019–2020 and another 10 standards in 2020–2021. The formulation of National Standards specifications on herbal tea and handmade paper (desho) and the determination of moisture content of the following: oven drying method, paneer, butter, buckwheat flour, black lead paper-cased pencil, raw silk, (grading and methods of tests Parts 1 to 11) and textiles (requirements for marking textile materials made of silk), were underway in the fiscal year 2019–2020.

5.6.2 National Metrology Laboratory

The National Metrology Laboratory (NML) has been established under the BSB to operate metrological referral and calibration laboratories. The NML maintains the national standards for measurement units traceable to international standards and provides calibration and verification services (see Table 5.4) in mass, length, volume and temperature to maintain accuracy of all weights and measures in the country. The NML also provides legal metrology services which is the verification of weights and measures in the domestic market to protect consumers on measurement. The NML is accredited to ISO/IEC: 17025 by the National Accreditation Board for Testing and Calibration Laboratories (NABL) of India and covers the scopes on mass and length. Accreditation for additional scope (volume, pressure and temperature) is under consideration.
Table 5.4: Industrial and legal metrology services in NML, BSB

<table>
<thead>
<tr>
<th>Calibration services</th>
<th>Verification services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameter</strong></td>
<td><strong>Parameter</strong></td>
</tr>
<tr>
<td>Mass</td>
<td>Mass</td>
</tr>
<tr>
<td>Mass</td>
<td>Mass</td>
</tr>
<tr>
<td>Volume</td>
<td>Pipettes</td>
</tr>
<tr>
<td>Volume</td>
<td>Volumetric Measures</td>
</tr>
<tr>
<td>Volume</td>
<td>Volumetric Measures</td>
</tr>
<tr>
<td>Length</td>
<td>Line Standard</td>
</tr>
<tr>
<td>Length</td>
<td>Line Standard</td>
</tr>
<tr>
<td>Length</td>
<td>End Standard</td>
</tr>
</tbody>
</table>

BSB’s metrology laboratory has inadequate metrological equipment and lacks the qualified staff to cater to the needs of the service industry, both in terms of calibration services and compliance monitoring. BSB has housed the metrology laboratory within the office combined with a product testing laboratory and lacks a dedicated metrological laboratory. While there are ample opportunities to earn revenue by providing calibration services to all relevant sectors, such as trade and industries, Bhutan has a long way before it can adequately provide services and fully tap into the market. A well-established and accredited metrology laboratory will bring confidence to the consumer and protect their interests. It can boost trade by enhancing the image of development partners, tourism and countries importing Bhutanese products.

5.6.3 Status on conformity assessment on trade facilitation

Economies need access to credible conformity assessment services. It is a fundamental activity in the administration of many technical regulations. Reliable conformity assessment services are essential to demonstrate that products, processes, services and commodities meet required specifications; establish and monitor appropriate requirements for protection of health, safety and the environment; protect consumers through control of unfair trading practices; improve international trading opportunities by reducing TBT, and demonstrate compliance with specifications. Both BSB and BAFRA have limited areas of conformity assessment and they need to strengthen testing facilities and enhance personnel capacities to cover areas concerning trade facilitation.

5.6.3.1 Certification body

The certification body provides written assurance that a product, service, process, personnel, organization or management system conforms to specific requirements.
i. Product certification – building products

The Certification Division under the BSB was established with the mandate to carry out product certification schemes in the country, undertake independent conformity assessment and provide a written assurance (a certificate) that the product, service or system in question meets specific requirements. The Product Certification Scheme of BSB is accredited as per the international standard ISO/IEC 17065:2012.

The accreditation scope for TMT reinforcement bars, cement and bitumen emulsion is granted by the NABCB (India) based on assessment of competence as based on relevant international standards. The BSB product certification body has provided product certification and brand approval to more than 170 clients for civil engineering and electrical products as shown in Table 5.5 below.

Table 5.5: List of approved products (2020)

<table>
<thead>
<tr>
<th>Civil engineering products approved</th>
<th>Electrical products approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product category</td>
<td>Product category</td>
</tr>
<tr>
<td>Boards and ply</td>
<td>Wires and cables</td>
</tr>
<tr>
<td>Valves and cocks</td>
<td>Water heaters</td>
</tr>
<tr>
<td>Pipes and fittings</td>
<td>Switch gears</td>
</tr>
<tr>
<td>Duct pipes</td>
<td>Protective devices</td>
</tr>
<tr>
<td>Tanks</td>
<td>LEDs</td>
</tr>
<tr>
<td>Steel poles</td>
<td>Conduits</td>
</tr>
<tr>
<td>Steels for structural purposes</td>
<td>Batteries/cells</td>
</tr>
<tr>
<td>Reinforcement steel</td>
<td>Switch, socket and WD</td>
</tr>
<tr>
<td>Aluminum for general engineering purposes</td>
<td>Elevator</td>
</tr>
<tr>
<td>Faucets</td>
<td>Escalator</td>
</tr>
<tr>
<td>Roofing sheets</td>
<td>Fan</td>
</tr>
<tr>
<td>Shutters and gates</td>
<td>HT power cable/overhead bare conductor</td>
</tr>
<tr>
<td>Gabion mesh</td>
<td>Electrode</td>
</tr>
<tr>
<td>Sanitary appliances</td>
<td>Analog/Digital Meters</td>
</tr>
<tr>
<td>Paints</td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td></td>
</tr>
<tr>
<td>Mining and rock tools</td>
<td></td>
</tr>
<tr>
<td>Admixtures and water proofing com-</td>
<td></td>
</tr>
<tr>
<td>pounds</td>
<td></td>
</tr>
<tr>
<td>Concrete bricks, block and others</td>
<td></td>
</tr>
<tr>
<td>Bitumen</td>
<td></td>
</tr>
<tr>
<td>Adhesives</td>
<td></td>
</tr>
</tbody>
</table>
While BSB has capacity for product or brand approval, it has limited accreditation scope for product certification; thus, it needs to diversify its capacity to cover other products.

ii. Management System Certification

The Certification Division under the BSB has been mandated to carry out Management Systems Certification schemes. Management System Certification is operated in compliance with ISO/IEC 17021:2015 and has received accreditation in ISO 9001:2015 (Quality Management System or QMS) certification for three scopes: food (animal feeds), finance (banking) and administration (municipal services). The ISO 9001 Standard helps to ensure that customers get consistent, good-quality products and services, which in turn generates business benefits.

NABCB (India) granted accreditation after a comprehensive assessment, based on relevant standards. BSB's Certification Division has provided QMS certification to four local organizations: Karma Feeds, Bank of Bhutan, Phuentsholing Thromde and Bhutan Bitumen Industries Pvt Ltd.

Similarly, BSB needs to diversify its scope of certification to facilitate trade in other areas, such as information technology, tourism and hospitality, and documentation control on import and export.

iii. Food safety and quality regulations in Bhutan

BAFRA, under the Ministry of Agriculture and Forests, is the regulatory authority for biosecurity and food safety systems to protect the farming system and promote the quality and safety of food and agricultural-related products. BAFRA carries out inspection and certification of food and agricultural goods and products to ensure their quality and safety, to facilitate trade and enhance market access. It has field offices in 20 Dzongkhags, Dungkhags, major entry points, minor entry points and other branch offices including the National Food Testing Laboratory at Yusipang, Thimphu. Importation of food products into Bhutan is regulated following the Plant Quarantine Rules and Regulations (2018), Food Act of Bhutan (2005), Seed Rules and Regulations (2018), Food Rules and Regulations of Bhutan (2017) and Livestock Rules and Regulations of Bhutan (2017).

BAFRA functions as the focal point for the following international organizations:

- International Plant Protection Convention (IPPC)
- Codex Alimentarius Commission (CAC)
- National Enquiry Point for WTO Agreement on Sanitary and Phytosanitary Measures
- International Food Safety Authorities Network (INFOSAN) for International Health Regulations (IHR)
- Cartagena Protocol on Biosafety (CPB) for Conventional Biodiversity (CBD).

To facilitate its activities, BAFRA has also signed MoUs with the Food Safety and Standards Authority of India (FSSAI), Export Inspection Council of India and the Department of Agriculture Extension, Bangladesh.

Sanitary and Phytosanitary (SPS) measures implemented by BAFRA include:

- For any import or export of food and agricultural products, SPS permits need to be obtained prior to importation or exportation.
- In-country movement permits are to be obtained from the nearest BAFRA office for the movement of plants, animals and their products within the country.
• Prior approval in the form of an import permit to import food commercially into Bhutan must be obtained from BAFRA and food imported into Bhutan must meet applicable standards. The import of food products of animal and plant origin must be processed two weeks prior to the import of the consignment.

• Exporters wishing to commercially export locally processed food products of Bhutan have to approach the nearest BAFRA office to secure an export certificate. The certificate is issued against the batches of products intended for export after testing against the safety standards.

• The manufacturer, importer, producer, distributor or retailer have to ensure that the pre-packaged food placed in the market is labelled in accordance with the mandatory standards/requirements on labelling.

• All food businesses have to obtain food safety licences to operate. A food business that complies with BAFRA GHP/GMP criteria for licensing of food business are issued a food safety licence.

• The Food Act of Bhutan 2005 authorizes BAFRA to carry out inspection, analysis or documentation as required by the relevant importing country or countries.

• Based on the Plant Quarantine Act of Bhutan 1993 and the Plant Quarantine Rules of Bhutan 2018, prior approval must be obtained from the Plant Section under BAFRA before any plants or related products are imported into Bhutan. Any plant or plant product must be accompanied by phytosanitary certification with consignment to facilitate proper export.

• The Livestock Act of Bhutan 2001 authorizes BAFRA to inspect for the quality and safety of all livestock products intended for human consumption before such products are put on the market.

iv. Product certification – food and agriculture products

BAFRA is mandated to provide product certification services to support industries and commerce in Bhutan for market access and trade facilitation. BAFRA provides certification through BAFRA-Certification Services (BAFRA-CS) and has launched a Product Certification Scheme in conformity with the Food Act of Bhutan 2005 and implements product certification in conformity with ISO IEC 17065:2012 to provide a third party mark of certification.

BAFRA-CS has three product certification schemes: food products, organic products and Bhutan Good Agricultural Practices (GAP) products. It is accredited by NABCB (India) for three products – packaged drinking water, packaged natural mineral water and fruit juices. As mandated, BAFRA issues food licences to many companies in the country.

In terms of enforcement and monitoring, BAFRA undertakes a range of activities to ensure that food businesses comply with legislative requirements detailed in the Food Act of Bhutan 2005 and its Rules and Regulations 2007. The inspections are carried out based on the Criteria for Good Hygienic and Manufacturing Practices for Licensing of Food Business set by BAFRA. The feasibility inspection, preliminary inspection, follow-up inspection, surveillance inspection and independent testing of samples are conducted. BAFRA also monitors the operations of temporary food stalls and street food vendors. Apart from inspection and licensing of established food businesses, the temporary food stalls and street vendors are also monitored to ensure compliance to the minimum standards developed pursuant to the Food Act of Bhutan 2005.
5.6.3.2 Testing

One of the most common forms of conformity assessment is when a product is tested against a specific set of criteria, such as performance or safety. It plays an important role in the transaction of goods and services. It is therefore necessary that testing laboratories produce credible test reports recognized in the world market and establish the status and competencies of laboratories engaged in testing products.

i. Product Testing Laboratory

The Product Testing Laboratory under the Bhutan Standards Bureau (BSB) was established to provide testing facilities to construction products and materials and conduct research and development for standards formulation. Currently, the Product Testing Laboratory provides the following testing services (Table 5.6):

<table>
<thead>
<tr>
<th>Building product tests:</th>
<th>Building materials tests:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests on cement</td>
<td>Tests on fine aggregates</td>
</tr>
<tr>
<td>Tests on steel and steel components</td>
<td>Tests on coarse aggregates</td>
</tr>
<tr>
<td>Tests on bitumen/bitumen emulsion</td>
<td>Tests on soil</td>
</tr>
<tr>
<td>Tests on concrete/building blocks</td>
<td>Tests on road subgrade</td>
</tr>
</tbody>
</table>

As per the Standards Act of Bhutan 2010, BSB’s mandate is standards development. This requires having an accredited product testing laboratory and a third-party test certificate provider. The routine testing of construction materials as part of quality control for civil construction is not included in mandate.

With its limited scope and testing capacity, its accreditation capacities need to be enhanced to cover other products, such as HDPE pipes, roofing materials and building blocks.

ii. Electrical Safety Laboratory

The Electrical Safety Laboratory under the Bhutan Standards Bureau was set up to provide testing services for electrical and electrical-related products. Under the current setup, the following electrical parameters can be tested for different electrical components: fire-resistant test, heat-resistant test, ball pressure test, insulation resistance test and earth continuity test.

iii. Food Safety Laboratory – National Food Testing Laboratory

The National Food Testing Laboratory (NFTL), located in Yusipang, Thimphu, has testing facilities for food microbiology, residues, contaminants, nutrition and GMO (biotechnology) detection aspects. The NFTL is mandated to:

- Perform laboratory analysis of food and agricultural products for quality and safety of microbiological and chemical parameters and genetically modified organism (GMO) content in food and agricultural products and generate test reports
- Work in close coordination with other divisions of BAFRA to complement the regulatory activities carried out by BAFRA
- Provide technical backstopping to BAFRA field offices in sampling and analysis
- Liaise with other relevant international, regional and national-level laboratories and organizations to improve laboratory services.
The NFTL is accredited to ISO/IEC 17025 (General Requirements and Competence of Testing and Calibration Laboratories) by the National Accreditation Board for Testing and Calibration Laboratories (NABL), India. A recognized accreditation body in India, NABL aims to accredit testing and calibration laboratories. It is a member of the International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Accreditation Cooperation (APAC). The scope of accreditation of NFTL includes both chemical and microbiological quality and safety parameters covering various food and agricultural product categories including drinking water (Table 5.7).

Table 5.7: Scope of accreditation (ISO/IEC 17025) in NFTL (2020)

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Biological</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food and agricultural products</td>
<td>Food and agricultural products</td>
</tr>
<tr>
<td>Jam, sauces, pickles, fruit juices, canned fruits and vegetables, marmalades</td>
<td>Products of fruits, vegetable and beverages</td>
</tr>
<tr>
<td>Cereals and cereal products: biscuits, maize grits, rice, bread</td>
<td>Products of cereals and bakery</td>
</tr>
<tr>
<td>Tea, beverages (alcoholic/non-alcoholic)</td>
<td>Products of milk and dairy products</td>
</tr>
<tr>
<td>Alcoholic beverages: whiskey, beer and wine</td>
<td>Canned meat/raw frozen meat</td>
</tr>
<tr>
<td>Milk and dairy products</td>
<td>Frozen fish and fishery products</td>
</tr>
<tr>
<td>Honey, oils and fats</td>
<td>Drinking water, raw water</td>
</tr>
<tr>
<td>Water: drinking water, raw water</td>
<td>GMO products</td>
</tr>
<tr>
<td>Residues in water</td>
<td>Corn, soya, eggplant, soya-based food and feed products.</td>
</tr>
<tr>
<td>Trace metal elements</td>
<td></td>
</tr>
<tr>
<td>Residues in food products</td>
<td></td>
</tr>
<tr>
<td>Pesticides, fruits and vegetables</td>
<td></td>
</tr>
<tr>
<td>Mycotoxins, chili powder</td>
<td></td>
</tr>
</tbody>
</table>

BAFRA has also established satellite food safety laboratories in Samtse, Phuentsholing, Samdrup Jongkhar and Paro and performs basic tests on quarantine samples and onsite food safety tests.

The export of food products to India and other countries requires a certificate of origin (CO) which is a document declaring in which country commodities or goods are manufactured. Food products are required to be packed in a manner that facilitates the inspection and collection of samples. Exports to India require adherence to the Food Safety and Standards Authority of India (FSSAI) Import Regulations 2016 and the General Grading and Marking Rules 1998. However, proper institutional arrangements and guidelines are missing.

Similarly, the export of mandarin, cardamoms and chilies, juices and packaged food must meet food safety certification by border customs authorities from reputable institutions in India. The problem is compounded as India does not recognize the test certificate issued by BAFRA for processed food but makes it compulsory to produce the FSSAI certificate.
Likewise, export of goods to Bangladesh requires certification either from the importing country’s certifying authorities or from a third-country laboratory accredited by the International Organization for Standardization (ISO) or the South Asian Regional Standards Organization (SARSO) in Dhaka, Bangladesh. Most tests requiring sophisticated equipment and techniques are outsourced; samples are sent to India and Thailand, incurring delays and high costs. To facilitate trade and make Bhutanese products more competitive, there is a need to assess the current inventory of SPS and technical barriers to trade infrastructure, legislation and capacity-building, including the possibility of signing a mutual recognition agreement (with India, Bangladesh, Nepal and other countries in the region) to harmonize and recognize testing, conformity assessment, certification and accreditation.

5.6.4 Inspection body

BAFRA performs inspection services to ensure food safety and quality and verify compliance. Food imported and exported commercially to and from Bhutan is subject to inspection. This is carried out based on the risk-based inspection and sampling manual it has developed. BAFRA is also applying for accreditation of its inspection services for ISO/IEC 17020:2012 to enhance food safety and quality in the country. The ISO/IEC 17020 is an international standard that specifies requirements for the competence of bodies performing inspection and for the impartiality and consistency of their inspection activities.

BAFRA is also authorized to inspect the quality and safety of all livestock products intended for human consumption before they are released in the market. BAFRA carries out inspection of different types of meat, dairy products and eggs. Inspection of food animals begins with checking the live animal prior to processing at slaughterhouses and through the entire production chain.

One issue that needs thoughtful deliberation is BAFRA undertaking testing and certification (i.e. acting as a certifier) while also monitoring compliance, i.e. its regulatory function. This can be seen as a potential conflict of interest and can cast doubt on its credibility to perform both functions.

5.6.5 Accreditation body

As a result of the liberalization of global trade and increasing demands for quality and safe products and services, both governments and industries increasingly rely on efficient and effective Conformity Assessment Bodies (CABs) to provide conformity assessment services. However, the effectiveness and competence of a CAB does not simply happen. This can only be determined, developed and sustained through an accreditation system. Governments and industries worldwide today rely on accreditation bodies to confirm the competency of CABs to assess and certify products and services against an agreed set of standards or criteria. The CABs ensure that tested products, industrial processes, services and systems are reliable and conform to agreed, voluntary and mandatory standards or criteria.

There is no recognized accreditation body in Bhutan. However, the National Accreditation Focal Point (NAFP) has been established within the Bhutan Standards Bureau (BSB) to facilitate accreditation of conformity assessment bodies and laboratories in the country and provide access to internationally recognized accreditation services. NAFP’s responsibilities include:

- To provide internationally recognized accreditation for applicants in Bhutan
- To link clients with partner accreditation bodies
- Domestic marketing and promotion of accreditation and accredited laboratories, inspection and certification bodies to the industry and to survey accredited bodies
- To link government authorities needing conformity assessment services with CABs
To monitor the conformity assessment bodies accredited in Bhutan

To cooperate with partner accreditation bodies: the National Accreditation Board for Testing and Calibration Laboratories (NABL) and the certification bodies (NABCB) in India.

The NAFP of BSB has been a member of the SAARC Expert Group on Accreditation (SEGA) since 2010. The NAFP has assisted in achieving the accreditation of the National Metrology Laboratory and the BAFRA laboratory.

Box 5.2: Impacts emerging from the COVID-19 crisis

The COVID-19 pandemic has posed challenges and questions to Bhutan’s QI systems, in particular with relation to food safety and the standardization of laboratories. The need to have the National Quality Policy (NQP) implemented at the earliest opportunity is imperative, as it will serve to clearly identify and define the roles and responsibilities of all actors involved in Quality Infrastructure. The Draft NQP does not cover all agencies, most important of which is BAFRA. Other important agencies from the pharmaceutical area and health laboratories are missing too.

The policy hints at redefining the roles between regulatory authorities and the BSB but fails to set a timeline and specific monitoring and evaluation criteria of the policy. Unless the policy can realign the organizational roles and powers, it is worthwhile to include all agencies in this document.

According to QI institutions and BAFRA, the COVID-19 pandemic has affected the product testing and certification chain and processes, including organic certification. In light of the pandemic, officials are in the process of developing standard operating procedures for certification processes.

Bhutan lacks calibration laboratories for the validation of new medical equipment and performance compliance of existing equipment (ventilators, x-ray machines, CT scanners, syringe pumps, radiant warmers, anaesthesia machines, etc.) including protective gear and products (masks, clothing, sanitation products) such as improvised masks made from clothes and regular clothing materials. The issue is not isolated to the COVID-19 situation and has been a pressing issue raised by medical experts in Bhutan. While the procurement system is largely blamed for the substandard items, the lack of such laboratories and systems is in fact the cause.

Environmental and waste management standards (the ISO 14000 series) will become important in managing the increased waste caused by the increase use of single-use protective equipment (protective clothes, single-use gloves, medical masks, etc.). It is particularly important for health facilities to adhere to guidelines on bio-medical waste generated from quarantine health facilities to stop the spread of infection.

On the safety of food items, BAFRA has prepared In-Country Livestock Biosecurity Guidelines 2015. The guidelines, as the name suggests, address zoonotic diseases such as the bird flu and swine flu, based on the recent global outbreaks. Unfortunately, it fails to address possible safety issues and operating procedures during global pandemics.
A Quality Infrastructure system is required for the effective operation of domestic markets. Its international recognition is important to enable access to foreign markets. However, QI can be complex. Thus, it is often not understood and is considered secondary in Bhutan’s reform agenda. This chapter presented the status and roles of the QI system in Bhutan, including the constraints faced by QI institutions.

QI institutions in Bhutan have grown over the years but there is still a need to enhance their capacity and to continuously work towards international recognition. There is a need to harmonize relevant laws, regulations and policies to provide clarity of the roles and responsibilities of QI institutions for effective coordination among the players of the QI system. Awareness of the significance of QI components—standardization, conformity assessment, accreditation and metrology—need to be strongly advocated and supported by a strong leadership towards a robust quality culture.

5.7 Gaps—Quality Infrastructure institutions

There are several institutional gaps in the development and implementation of standards. These include:

- The Bhutan Standards Bureau (BSB) is the national standards body of Bhutan established through the Bhutan Standards Bureau Act 2010 to formulate and develop national standards. However, the National Food Quality and Safety Commission established under the Food Act of Bhutan 2005 is also mandated to develop national standards, thus, creating ambiguity.
- Inadequate coordination between the national standards body, regulators and other stakeholders at the national level and at the border.
- Lack of recognition of reports issued by the Bhutanese certification bodies and testing laboratories outside the country, which is a major interference to trade.
- There is a need to develop SPS/TBT capacity and strengthen SPS/TBT enquiry points so that they become more functional and resourceful.
- Need to strengthen the capacity of the laboratories, secure accreditation for the product testing laboratory (BSB) and increase the scope of accreditation of the food testing laboratory (BAFRA) and metrology laboratory (BSB) to enhance competency and maintain international recognition.
- Absence of a mutual recognition agreement (with India, Bangladesh, Nepal and other countries in the region) to harmonize and recognize testing, conformity assessment, certification and accreditation.
- Lack of enforcement of the mandatory requirement of product certification of BSB by government agencies.
- Absence of laws and regulations on weights and measures for consumer protection.
- Lack of awareness on standardization, metrology, conformity assessment and accreditation and, apart from the development of relevant standards, the competency of auditors and inspectors is crucial for any certification body to function effectively and fulfil the requirements of the operators. In this regard, liaising with relevant agencies, institutional and professional capacity-building programmes need to be explored and developed for the successful implementation of the programme promoting organic products.

5.8 Conclusion and recommendations

A Quality Infrastructure system is required for the effective operation of domestic markets. Its international recognition is important to enable access to foreign markets. However, QI can be complex. Thus, it is often not understood and is considered secondary in Bhutan’s reform agenda. This chapter presented the status and roles of the QI system in Bhutan, including the constraints faced by QI institutions.
Standards and Quality Infrastructure have an important impact on Bhutan’s economic integration with the global economy. Standards, technical regulation and conformity assessment procedures, and metrology, including adhering to SPS measures, can help facilitate Bhutan’s exports of commodities and light manufacturing products as well as cater to higher quality and sustainably produced products and services.

With LDC graduation in sight, the push to switch from quantity- to quality-focused production, together with a proposed emphasis on organic products and niche markets all underscore the need for Bhutan to strengthen its institutional and regulatory frameworks for quality. At the same time, Bhutan aspires to protect domestic and international consumers and ensure their safety from counterfeit and unsafe products. As Bhutan’s sectors are increasingly adding value to their products by moving to semi-processed, semi-finished goods, an update of Quality Infrastructure is needed to fill the gaps identified and ensure adherence to international commitments and meeting buyers’ demands.

It is widely acknowledged that technical regulations, standards and conformity assessment procedures (SPS/TBT measures) quite often constitute unnecessary barriers to trade and therefore, strengthening and reforming the QI system and its institutions is indispensable to address these issues, facilitate trade, gain market access and ensure quality products, processes and services in Bhutan.

The following are the identified key constraints:

• Lack of recognition of reports issued by the Bhutanese certification bodies and testing laboratories outside the country, which is a major interference to trade. This is attributed to both the weak QI system in place and the absence of a mutual recognition agreement (with India, Bangladesh, Nepal and other countries in the region) to harmonize and recognize testing, conformity assessment, certification and accreditation.

• Lack of enforcement by government agencies of the mandatory requirements of BSB’s product certification.

• Absence of laws and regulations on weights and measures for the protection of consumers.

• Lack of awareness on standardization, metrology, conformity assessment and accreditation.

• Absence of a web-based portal dedicated to disseminating TBT- and SPS-related information and documents. The business establishments interviewed as well as BAFRA and BSB officials mentioned the lack of advocacy and knowledge on TBT and SPS-related information among business establishments and consumers alike. Instances of people calling up these institutions demanding an ISO certificate, FSSAI certificate or standards were mentioned. An excellent example of a useful relevant resource was published by ITC in partnership with Physikalisch-Technische Bundesanstalt and the Federation of Nepalese Chambers of Commerce and Industry (FNCCI) titled, “Managing Quality in Nepal: A Directory for SME.” Such a publication for Bhutan would be a useful resource for creating awareness. In addition, an interactive web-based portal would make efforts more dynamic and robust and is the preferred option.

Based on the above constraints, the key recommendations are:

• Urgently address the gap between the recognition reports issued by the Bhutanese certification bodies and testing laboratories outside the country.

• Harmonize standards of the traditional weights and measures in the country, adopt a uniform metric or imperial system in addition to retaining the traditional system, and work towards adopting of uniform weights and measures by all businesses especially in farmers markets.

• Enhance coordination between the national standards body, regulators and other stakeholders both at the national level and at the border.

• Develop SPS and TBT capacity and strengthen the SPS and TBT enquiry points so that
they become more functional and resourceful. This is a critical finding. Their weakness is a serious impediment to smooth trade between Bhutan and its neighbouring countries. Mutual recognition with other countries such as Thailand and some countries of the European Union would help to increase trade flows between Bhutan and these countries. SPS measures can help facilitate Bhutan’s exports of commodities and light manufacturing products, bringing a tangible shift from quantity to quality, coupled with higher productivity and sustainability.

- Strengthen the capacity of the laboratories, secure accreditation for the product testing laboratory (BSB) and increase the scope of accreditation for the food testing laboratory (BAFRA) and the work scope of the metrology laboratory (BSB) to enhance competency and maintain international recognition. A dedicated national project on strengthening and capacity development for national laboratories should be explored.

- Explore the possibility of establishing an accredited laboratory at the border both for agro-based produce and manufactured food and non-agro based products such as for ferro-silicon, high-density polyethylene (HDPE) products and roofing materials. This will reduce the time and cost of testing, thereby reducing the unit cost of the product or produce.

- Besides the product standards, the BSB also has access to international standards related to trade facilitation which could boost businesses and trade. Standards such as ISO 9001 Quality management systems, ISO 14001 Environmental management systems, ISO/IEC 27001 Informational security management systems, ISO 22301:2019 Security and resilience – Business continuity management systems, ISO 31000:2018 Risk management, and many other such standards help industries and organizations to continuously improve their performance and increase their capability to deliver improved services and products.

Box 5.3: Supporting Quality Infrastructure to pursue the goals of the 21st Century Economy Roadmap

Bhutan’s 21st Century Economic Roadmap, a journey towards a high-income society with Gross National Happiness is expected to guide the country’s economic development. Bhutan has embraced international trade and investment to support its socio-economic development aims. This includes removing constraints to growth, prioritizing private sector development and emphasizing trade and investment as drivers. But trade is constrained by geography and trade facilitation is a primary concern.

The preliminary results of the UN Global Survey on Digital and Sustainable Trade Facilitation 2019 confirm that Bhutan remains behind many Asian economies in trade facilitation. Bhutanese trade is still affected by significant non-tariff barriers. Many firms face significant trade-related challenges related to risk management, automation of procedures, cumbersome documentation, transparency and the quality of infrastructure. They also lack knowledge of international market requirements and demands. SMEs also face issues during transit given Bhutan’s dependency on its neighbours for trade routes. Traders face problems, with goods detained at checkpoints and cumbersome documentation procedures.

There is a need to improve trade logistics and border infrastructure in the country. Given the landlocked status of Bhutan, any future strategy will have to consider ways to reduce transport costs and travel times between Bhutan and other countries. Strong and robust Quality Infrastructure is perceived as an important trade facilitator.

Paperless trade can make trade more efficient and transparent while improving regulatory compliance. Building on government plans for widespread digitalization, further accelerating paperless trade implementation can support trade development in Bhutan.

Bhutan is not a member of the WTO, but estimates suggest that if Bhutan implements the trade facilitation measures included in the WTO Trade Facilitation Agreement (TFA) along with paperless trade, it could achieve trade cost reductions of around 30 percent (opposed to 10 percent if the country aims for basic compliance with the TFA alone).
References


CHAPTER 6

TRADE DIVERSIFICATION
6.1 Introduction

It is to Bhutan’s advantage that it borders the fastest growing and most dynamic Asian economies, India and China, which are also the two biggest countries in the world by population. India is by far Bhutan’s biggest trading partner, accounting for more than 85 percent of Bhutan’s merchandise exports and almost 80 percent of imports.

Yet, despite the advantages of bordering such large and fast-growing economies, this dependency clearly exposes Bhutan to volatility and creates currency risks, as described below. One of the main questions is the extent to which meaningful diversification away from the Indian market, by product and destination, is desirable and possible, given that little such diversification has taken place in the eight years since the DTIS 2012. An alternative is that the existence of such a strong trading relationship should be acknowledged and maintained, with product diversification pursued as a priority over geographic diversification. Clearly, both options can be pursued simultaneously, but the relative priority accorded to each remains a pivotal question for trade policymakers as they move through and beyond Least Developed Country (LDC) graduation.

Trade between India and Bhutan is mainly governed by an extremely liberal bilateral trade agreement in place since 1972, which has no rules of origin or tariffs, although the introduction of goods and services tax (GST) in India has altered trade incentives. This close relationship and liberal trade regime has helped facilitate the main driver of economic activity, the production and export of hydropower-produced electricity. In addition, economic growth continues to be driven by ferro-alloys (which, however, are in decline), tourism and the commercialization of some rural agricultural activities.

One important question is whether the existing reliance on hydropower, minerals and ferro-alloys can be displaced by the desired shift towards more value-adding and sustainable activities, based on the national ideal of Gross National Happiness (GNH), which aims to “maximize the happiness of all Bhutanese and to enable them to achieve their full and innate potential as human beings,” advocating “a harmonious balance between the material and non-material dimensions of development.” The pursuit of such a unique concept has undoubtedly helped align government policies and generate a national vision and legitimacy—something which is important and often underappreciated in LDCs. Economic growth and the GNH emphasis on human assets have also helped Bhutan to meet the LDC graduation criteria.

Another important issue is whether a strategy of export-oriented production based on particular niche products, perhaps branded, can form the basis of a viable development strategy, or whether complementary and alternative strategies should be pursued, for example, focusing on services exports facilitated by information and communications technology (ICT), which has the advantage of a potentially unlimited market, low capital expenditure, rapid upskilling potential, compatibility with sustainable development and increasing importance in the more virtual, post-COVID world.

6.2 Export performance

In nominal terms, goods exports are increasing slowly, largely driven by trade with India, Bhutan’s largest trading partner. Figure 6.1 below shows that overall, in the past 10 most recent years for which international data are available, exports grew approximately 25 percent in total, with an upturn in 2015, largely due to Bangladesh, a destination to which exports subsequently declined, albeit slowly.
However, despite this nominal increase, over the same time period and since the completion of the original DTIS 2012, exports of goods and services have declined as a proportion of overall economic output, falling from almost 45 percent of GDP in 2010 to just above 30 percent in 2018. This decline in the overall export to GDP ratio is of particular concern in an era of trade liberalization and purported export promotion and overall improved economic performance. Despite its success, Bhutan’s exports to GDP ratio has underperformed the trend for all LDCs, where on average, exports fell as a proportion of GDP from 28 percent to 24 percent over the same period despite a small upturn in recent years (Figure 6.2).

Source: IMF.

A small number of products have dominated exports during the most recent decade (Figure 6.3). Electricity remained the highest merchandise export over the past 10 years, averaging 36 percent of exports between 2007 and 2017. Another 45 percent of exports was concentrated in only 10 commodities. An absence of product diversification itself brings volatility, but on top of this, earnings from these products can be vulnerable to both external and internal shocks, reflected in the relatively low performance on the UN Committee for Development Policy Economic Vulnerability Index.

Figure 6.3: Top 10 exported items in 2010 vs 2018 (in BTN million)

![Figure 6.3: Top 10 exported items in 2010 vs 2018 (in BTN million)](image)

Source: ESCAP, compiled from Bhutan Trade Statistics, Ministry of Finance.

Figure 6.4, using the six-digit level of the Harmonized Commodity Description and Coding Systems, confirms that electrical energy (HS 271600) is the top export, followed by ferro-silicon (HS 284910). Looking at the two-digit product code, mineral products (HS 25 and 27) account for a majority of the total exports, followed by metals (HS 72) and chemical products (HS 28).

Figure 6.4: Top 10 commodity exports

![Figure 6.4: Top 10 commodity exports](image)

Source: Ministry of Finance, Bhutan Trade Statistics, various issues.
India overwhelmingly dominates as an export destination (Figure 6.5), largely due to its demand for Bhutanese electricity exports, ferro-alloys, ferro-silicone and related items. Bangladesh is a distant second, with the European Union, Hong Kong SAR and Nepal accounting for a small proportion of exports. Dependence on the Indian market has even increased over the years. India accounted for 87 percent of total exports on average over the last decade. Exports to neighbouring Bangladesh are declining. Cross-referencing this picture with the DTIS 2012, it can be seen that little evolution of the export destination structure has taken place. According to the DTIS 2012, 89 percent of exports went to India; 3 percent to Bangladesh; and the rest to other countries.

Box 6.1: Export diversification since the DTIS 2012

Despite some progress in increasing exports overall in nominal terms, little export diversification has taken place since the DTIS 2012. Some 10 products continue to account for around 80 percent of overall exports with hydropower the biggest export, while, as noted, India remains by far the largest export destination. Services have not diversified much despite the relatively strong performance of tourism and the emergence of a growing ICT sector.

The Hirschman-Herfindahl index for Bhutan, a measure of the dispersion of trade value across an exporter’s partners, is 0.75 according to the World Integrated Trade Solution statistics. A country whose trade (export or import) is concentrated in very few markets will have an index value close to 1. A country with a perfectly diversified trade portfolio will have an index close to zero. The value for India, by contrast, is 0.05, while Bangladesh’s index value is 0.07. Nepal has a value of 0.31, which is much more diversified than Bhutan.

Several government initiatives and international projects have recently been launched with the aim of improving export diversification, including the US$1.5 million EIF Brand Bhutan Export Diversification project launched in 2020 and the ITC Export Diversification and Economic Growth and Poverty Reduction project. As noted elsewhere in this chapter and as originally acknowledged in the DTIS 2012, a promising route for future diversification is in IT-enabled services and related areas, particularly during COVID-19, which has reinforced the need for physically distant provision of services which were previously often supplied at greater physical proximity to major markets.

Figure 6.5: Exports by destination, 2010–2019 average

Source: IMF.
Services export growth has been more dynamic than the expansion of goods exports over the past decade (see Figure 6.6), approximately doubling over the period. In absolute terms, services exports now comprise around a quarter of goods exports. This dynamism (largely in tourism, but increasingly in other services exports such as ICT) is a trend which should be harnessed in export diversification efforts. The significant decline in 2019 and a probable collapse in 2020 are likely temporary and do not signify longer-term structural trends.

Manufacturing is inherently a higher-productivity, high-employment activity, given its potentially very high returns to scale and its ability to employ large numbers of relatively unskilled workers at the lower end of the value-adding scale. This mass employment production featuring increasing returns to scale underlies China’s more rapid economic growth over the past decades. A manufacturing strategy is thus, in an ideal world, preferable.

However, if circumstances do not permit it, the labour supply is limited and other obstacles exist, such as physical distancing and historical trends, a strategy of services growth, ideally with strong linkages to the rest of the economy, may be the next-best option. India is known as a country which has followed a services-oriented strategy rather than one devoted to manufacturing, like China. Bhutan is already a successful tourism exporter and can further connect this sector with domestic agricultural production, such as in the use of farm-to-table (see Box 6.4 below) and/or niche, organic products. Employment in services exports tends to be lower than in manufacturing and not at the equivalent scale as for low-skilled jobs in light manufacturing, such as textiles, which are for many countries, such as Bangladesh and Viet Nam, one of the first stages on the route to higher value-addition. Moving up along the value chain in services is increasingly facilitated by ICT and rapid advances in ICT have increased the tradability of many service activities and created new kinds of tradable services. In particular, “knowledge work” such as data entry and information processing services and research and consultancy services can increasingly be carried out via the Internet and e-mail and through tele- and videoconferencing. The acquisition of new skills in these areas can lead to the creation of new, higher-value-adding industries. These issues are discussed in more detail in Section 6.4 below.

Figure 6.6: Services exports (Balance of Payments (BoP), current USD)
6.3 Market conditions and policy environment

The period of almost a decade since the original DTIS has been marked by stagnation in world trade and high volatility, particularly in the COVID-19 period, where the collapse in world demand has been the worst in many decades. This global economic turbulence has been felt particularly strongly in LDCs and has made the achievement of development progress and international programmes of action particularly difficult, such as the Istanbul Programme of Action (IPOA) for LDCs and the Sustainable Development Goals.

Box 6.2: Impact of COVID-19 on export diversification

While it is too soon to know the precise long-term impact of COVID-19 on export diversification, the most immediate economic impact has been on tourism, as addressed in Chapter 8. Despite strong domestic health management and a limited number of cases, the crisis has led to the suspension of incoming visits, dealing a huge blow to the tourism sector, one from which it will take many years to recover. Bhutan’s tourism industry, however, may be less affected than others over the long run given that it is relatively high-end and high-yield and even if mass tourism declines, niche, specialist offerings will remain. Other industries have been less affected, given the ongoing demand for energy and relatively low human-resource intensity of production in several major export products. Clearly the main impact on Bhutan over the long term, as in most other countries, is the collapse in demand and any permanent ‘scarring’ effect of the long-term closure of many industries. The pandemic looks likely to result in a structural shift towards decentralization, more Internet and remote working, and a higher services content in physical production.

Although the impact has been severe, opportunities may paradoxically lie within. As it becomes clearer that economic activity is being permanently decentralized, with more activities occurring remotely, away from concentrations of people in urban centres, Bhutan’s IT strategy may begin to pay dividends. A host of activities is taking place online and many businesspeople and workers may never return to their offices. An increasing proportion of work will be outsourced to efficient, low-cost destinations and geographic location will matter even less than before. Countries and regions that are well-placed to take advantage of these trends will reap the biggest rewards over the coming years.

Bhutan has, against the odds, managed to weather some of this volatility and its impending LDC graduation is testament to the success of policymakers, its close relationship with fast-growing India and its natural assets. This said, exports have somewhat underperformed some comparable countries. Figure 6.7, showing world exports and Bhutanese exports indexed to 100 in 2000, shows that in real terms, Bhutanese exports have declined since 2010 while there has been an overall increase in world exports over the period despite the post-2014 downturn. Although world market conditions are difficult, several countries, even some LDCs, have been able to continue to raise export growth.

Figure 6.7: World and Bhutanese exports on the export value index (2000 = 100), 2010–2018

![Graph showing world and Bhutanese exports](Source: World Bank.)
Overall, calculations for this report show that real trade in goods and services (exports and imports) in the world as a whole increased by 37 percent over the period. In Bhutan, the increase was only around 1 percent. That Bhutan has seen little overall increase in goods and services exports, despite the increase in world trade and Bhutan’s continuing close relationship with fast-growing India, is a concerning sign.

One key reason why total exports of goods and services held up over the period, despite the decline in goods trade, was Bhutan’s robust growth in tourism until 2018 (when tourism receipts declined as a proportion of total exports, as shown in Figure 6.8).

Figure 6.8: International tourism receipts as a proportion of exports, 2010–2018

Bhutan’s close trading relationship with India is in some ways a source of dynamism, as the world’s second-largest country by population and fifth-largest by nominal GDP itself undergoes rapid growth and demand for external resources. Unlike most LDCs, Bhutan is unusually closely tied under a very open and stable trade agreement to a major source of demand and tourism. However, the relationship also creates difficulties, including trade dependency, overexposure to a single demand source and potential monetary instability.

6.3.1 Trade agreements and trade implications of LDC graduation

As an LDC, Bhutan receives market access to the preferential treatment schemes of developed countries and regions including the European Union and United States. Similar preferences have also been granted to LDCs by emerging and higher-income developing countries, such as Thailand, and duty-free imports to these countries have been increasing in recent years although remain at a very low absolute level.

Bhutan also receives market access concessions to LDCs through the regional trade agreement, the South Asian Association for Regional Cooperation (SAARC) Agreement on a South Asian Free Trade Area (SAFTA), which entered into force in 1995. Under SAFTA, the eight SAARC nations (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan

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92 See http://commerce.nic.in/trade/safta.pdf
and Sri Lanka) have pledged to cut tariff rates on a product-by-product basis. The three LDC members, Bangladesh, Bhutan and Nepal and one former LDC, Maldives, are granted additional market access preferences.\textsuperscript{93} However, the preference margin is not significant, due to the large number of goods excluded from duty-free treatment.

Independent of its LDC status, Bhutan can access markets on a preferential basis due to its participation in bilateral and regional trade agreements. In addition to the Indian bilateral agreement, in 2014, Bhutan signed a bilateral trade agreement with Bangladesh, but it grants only most-favoured nation (MFN) treatment.\textsuperscript{94}

Bhutan and Thailand signed a trade and economic cooperation agreement in 2013. The trade and economic cooperation agreement envisions collaboration in a wide range of areas including trade, investment, tourism, construction, health and medical care, education, energy, logistics services and the development of small and medium-sized enterprises. The two countries also agreed to set up a joint trade committee to implement the agreement, exchange views and discuss strategies to promote trade and investment.\textsuperscript{95} Negotiations for the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) Free Trade Area have also been initiated and would be to the advantage of Bhutan.\textsuperscript{96}

Below is an analysis for priority products of the tariffs that are affected or not affected by the possible graduation from the list of LDCs. Bhutan has been exporting to its main destination markets through various preferential tariff regimes. When Bhutan graduates, it may lose access to some of the LDC preferential schemes and become eligible for other tariff regimes (Generalized System of Preferences (GSP), GSP+, MFN, etc.) immediately or with some transition period. Bhutan will maintain access to existing bilateral and regional schemes, independent of its LDC status.

Based on the Committee for Development Policy analysis, Table 6.1 summarizes the lowest-possible average tariffs on Bhutan exports to be imposed by major and potential trading partners for the above-mentioned top 9 exports (excluding electricity) and top 15 potential exports, pre-and post-graduation. Major trading partners, shown in the headed row, are the large importers which, cumulatively account for more than 95 percent of the total export of the particular product. Simple averages of all applicable tariff lines are presented as the main result. For the cases where tariff rates vary at a more detailed product level pre- and post-graduation, further discussion using detailed product codes, for example, at the six-digit level, is presented in the text. The first number in a cell represents the best possible tariff for Bhutan as an LDC. The second figure is the best possible tariff for Bhutan as a non-LDC. Red figures present possibly large tariff margin losses (five percentage point changes) for potential export products due to graduation. Thus, red figures in a shaded area for products in bold represent a significant impact expected from a graduation on the current major export sector in main destinations.

\textsuperscript{93} See Asian Development Bank, https://aric.adb.org/fta/indo-Bhutan-treaty-of-trade
\textsuperscript{96} See http://bimstec.org/
6.3.2 Impact of graduation on tariff preferences

For existing major products and existing main destinations, no product group will face significant tariff changes in tariffs after graduation.

Bangladesh is one of the main destinations for cardamom (HS 090831), dolomite (251810) and gypsum (252010). These products are not covered by the SAFTA LDC arrangement and thus the same tariff lines under SAFTA will be applied before and after the graduation. Given the narrow range of preferential products under SAFTA, there would be no significant impact of graduation on tariffs faced in Bangladesh.

Ferro-silicon exports (720221) to the EU are not likely to experience a big change in tariff after the graduation. The average tariff would increase slightly from zero to 2.2 percent, without much variation within that product group.

### Table 6.1: Import tariffs exports, with and without LDC preferential treatment

<table>
<thead>
<tr>
<th>Product</th>
<th>HS</th>
<th>Bangladesh</th>
<th>EU</th>
<th>Hong Kong SAR</th>
<th>India</th>
<th>Nepal</th>
<th>Singapore</th>
<th>Thailand</th>
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</thead>
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<td>0/2.9</td>
<td>0/0</td>
<td>0/0</td>
<td>9/9</td>
<td>0/0</td>
<td>0/34.2</td>
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<td>15.7/15.7</td>
<td>0/55.3</td>
<td>0/0</td>
<td>0/0</td>
<td>12.7/12.7</td>
<td>0/0</td>
<td>22.8/39.8</td>
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<td>0/17.3</td>
<td>0/0</td>
<td>0/0</td>
<td>9/9</td>
<td>0/0</td>
<td>0/30</td>
</tr>
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<td>0/9</td>
<td>0/0</td>
<td>0/0</td>
<td>8.5/8.5</td>
<td>0/0</td>
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<td>25/25</td>
<td>0/6.1</td>
<td>0/0</td>
<td>0/0</td>
<td>9/9</td>
<td>0/0</td>
<td>125/125</td>
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<td>11.7/11.7</td>
<td>0/3.7</td>
<td>0/0</td>
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<td>9/9</td>
<td>0/0</td>
<td>0/28.6</td>
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<td>0/0</td>
<td>10/10</td>
<td>0/0</td>
<td>0/88.5</td>
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<td>0/0</td>
<td>15/15</td>
<td>0/0</td>
<td>27/27</td>
</tr>
<tr>
<td>Medicinal plants</td>
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<td>1.5/1.5</td>
<td>0/7</td>
<td>0/0</td>
<td>0/0</td>
<td>7.3/7.3</td>
<td>0/0</td>
<td>7.7/23.6</td>
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<td>0/0</td>
<td>0/19.7</td>
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<td>0/26.6</td>
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<td>0/0</td>
<td>6/11.2</td>
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<td>0/0</td>
<td>6/6</td>
<td>0/0</td>
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<td>0/0</td>
<td>6/6</td>
<td>0/0</td>
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<td>0/0</td>
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<td>0/5</td>
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<td>30/30</td>
</tr>
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<td>0/2.2</td>
<td>0/0</td>
<td>0/0</td>
<td>5/5</td>
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</table>

Notes: Products in bold are current major export products and products in italics are potential export products. A shaded area indicates the current main destinations of the corresponding product. The first figure is the average tariff as an LDC; the second figure is the possible average tariff as a non-LDC. Red represents a loss in preference of more than 5 percentage points.

Source: TRAINS.
In the case of India, tariffs based on the Agreement on Trade, Commerce and Transit are applied to all exports from Bhutan, regardless of Bhutan’s LDC status. For India, graduation will have no impact of the graduation on most of Bhutan’s major export products, such as cardamom, cement, silicon and ferro-alloy products.

Nepal is among the main destinations for gypsum (252010), which is not covered by SAFTA-LDC or SAFTA. The tariff rate on gypsum will remain at 5 percent, the MFN rate, regardless of Bhutan’s LDC status.

6.3.3 Special incentive arrangement for Sustainable Development and Good Governance

The biggest impact of LDC graduation for most countries is the loss of Everything But Arms (EBA), which can be partly compensated by the EU’s special incentive arrangement for Sustainable Development and Good Governance (GSP+). However, Bhutan currently exports very little to the EU, so graduation will have no immediate impact on exports to that region. The EU, as a formality, grants a three-year extension to the EBA programme, which would guarantee duty-free, quota-free market access until three years after graduation, most likely in 2026. However, as a back-up policy, it may be worth securing arrangements for market access to Europe in the event of an increase in exports of new products. If no alternative arrangements are considered and unless alternatives are negotiated, products would enter the EU under the standard GSP or most favoured nation (MFN) terms.

One of the most straightforward ways of securing continued market access without making concessions would be GSP+. GSP+ is non-reciprocal, meaning that it carries no tariff or trade liberalization implications on Bhutan’s side. Eight countries currently receive GSP+, including one former LDC, Cabo Verde. These countries are Armenia, Bolivia, Cabo Verde, Kyrgyzstan, Mongolia, Pakistan, the Philippines and Sri Lanka. Bangladesh is reported to be considering the scheme after it graduates in 2024. GSP+ grants duty-free access to 66 percent of EU tariff lines (in addition to products that are subject to zero MFN duties). Countries must ratify 27 conventions on human rights, labour rights, environmental protection and good governance as a condition for eligibility.

Bhutan is working on meeting the criteria for GSP+ and has passed 12 of the 27 conventions. The EU continuously monitors GSP+ beneficiary countries’ effective implementation of the 27 conventions, including exchanges of information, dialogue and visits. Various stakeholders are involved, including civil society. The European Commission publishes a report every two years outlining the progress made by beneficiary countries in implementing the conventions. Countries applying for GSP+ must not “have formulated reservations which are prohibited by these conventions” and must effectively implement the conventions. Once a country is granted GSP+, the EU checks that the beneficiary country abides by its commitments, conducting a continuous dialogue on compliance. That dialogue is based on a scorecard featuring information received from the beneficiary countries and international monitoring bodies and from other sources, including civil society, social partners, businesses, the European Parliament and the European Council. The EU organizes regular GSP+ monitoring visits to each beneficiary country to meet all stakeholders. Beneficiaries are expected to demonstrate that they make serious efforts towards tackling the issues set out in the scorecard. The GSP+ dialogue feeds into the public Generalised Scheme of Preferences (GSP) report, which the Commission must present to the European Parliament and to the European Council every two years. The report contains a detailed assessment of each beneficiary’s situation under the 27 conventions.
6.4 Market and product diversification

The government development strategy focuses on hydropower; cottage, small and medium-sized industries; mining; tourism and hospitality; and agriculture development. However, it is important to further specify certain industries within this broad focus by identifying a shortlist of industries to target as pioneer firms that may be experiencing increased costs due to changes in local factor endowments. Once pioneer firms invest and achieve quick wins, their success will demonstrate the potential gains of investment in Bhutan.

For the period 2010–2018, the product diversification and concentration index has remained relatively stable for Bhutan (Figure 6.9). The concentration index (product HHI) is a measure of the degree of product concentration. An index value closer to 1 indicates that the country’s exports are highly concentrated while a value closer to 0 indicates that exports are more homogeneously distributed among a series of products. The diversification index measures the absolute deviation of the trade structure of a country from the world structure. A value closer to 1 indicates more divergence from the world pattern.

Figure 6.9: Market diversification and concentration for Bhutan, 2008–2018

![Graph showing market diversification and concentration for Bhutan, 2008–2018](source: ESCAP, calculated from UNCTAD Stat database. Available at https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=120)

In the last decade, Bhutan maintains an average concentration index value of 0.367 while its product diversification index value has remained at 0.8, with negligible changes to either of these values. This indicates that Bhutan’s exports have consistently been homogeneously distributed within a small basket of products; its 47 export products have remained relatively stable over the years. Although the number of markets has increased over the years, the number of markets that Bhutan’s exports remains limited—23 markets in 2017.

6.4.1 Export products

The DTIS 2012 identified a number of potential priority products, including agricultural products (such as potatoes, apples, mandarins, cardamom and cordyceps), ferro-silicon and iron materials, as well as services. The Government of Bhutan has implemented five-year development plans since the 1960s. The current Economic Development Plan identifies medicinal health food, animal feed, forest-based products, poultry, dairy, apiculture and
horticulture as additional priority products.\textsuperscript{97} These sectors, as well as other service sectors, are included in the fiscal incentives to support the national development plan.\textsuperscript{98} Export potential indicators aim to determine export products among the existing basket of goods the country already exports competitively that have good prospects for export success in identified target markets. This is calculated from the ITC export potential database.

The United Nations Department of Economic and Social Affairs (UN DESA) has commissioned a number of Growth Identification and Facilitation Framework (GIFF) studies on productive capacity in LDCs, to identify potential sectors to contribute to achieving sustainable development. The GIFF study for Bhutan (2017) identifies the service sector as a particularly promising potential export sector.\textsuperscript{99} The International Trade Centre selects promising export products for export promotion activities, based on Export Potential Assessments (EPAs), a data-based methodology.\textsuperscript{100}

Box 6.3: Export diversification and the 21st Century Economic Roadmap

Export diversification will be central to the 21st Century Economic Roadmap, alongside import substitution. The roadmap will recognize the potential of technology and ICT—which help underpin the diversification strategy—as supportive of all sectors across the country. Macroeconomic stability and economic transformation by definition includes diversification, which is itself explicitly addressed in the section. The focus of the roadmap on hydropower also emphasizes the need for diversification. With regard to trade facilitation and foreign direct investment, the roadmap underlines the need to develop niche agricultural products in which the country has a comparative advantage.

As well as the 21st Century Economic Roadmap, several other initiatives and documents list products with export potential and this work should be acknowledged and incorporated into national planning and strategy. From the DTIS 2012, the Economic Development Policy and the work of UN DESA and the ITC, 15 export products with high potential can be identified: poultry (HS code 0207), dairy (04), apiculture (0409), horticulture (07), potatoes (070190), apples (0808), mandarins (080510), medicinal plants (12), cordyceps (210690), animal feed (23), plastic film (392099), particle board (4410), building stone (680221), iron ingots (720610) and copper wire (740819). While there are different grounds for the promotion of each and some are not new (particularly the last four items on the list), it will remain important to consider the full range of products recommended under various different methodologies and by different entities.

These product groups vary in term of the level of details—two-digit, four-digit and six-digit HS codes—because the reports and strategies suggest priority products in diverse different formats. Each of these products currently accounts only for a small portion of the total export, but some of them show rapid upward progress in recent years. While India is still the major market for these products, Bangladesh, Hong Kong SAR, Singapore and Thailand are starting to import these products from Bhutan, emerging as export destinations.

While diversification is currently limited (Figure 6.10), this is partly due to the expansion of hydropower, which in itself is an important success story. There have been some important examples of nascent diversification, particularly in ICT. Hydropower, however, is inherently a capital-intensive, low-employment activity with limited upstream linkages. Three of the five plants currently under operation together employ only 1,400 persons. While almost 95 percent of the employees are Bhutanese, very few are from affected communities. Construction has created major employment, but most has been undertaken by Indian companies with Indian workers.

\textsuperscript{97} Government of Bhutan, Economic Development Plan 2016.
\textsuperscript{99} UN DESA, Building productive capacity for LDC graduation in Bhutan (2017).
\textsuperscript{100} ITC (2017). Bhutan: Export potential assessment.
Ferrous metals exhibit the greatest export potential from Bhutan to the world (Figure 6.11). Ferrous metals represent the subsector with the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth US$131.1 million. Bhutan’s maximum and almost entire export potential is concentrated in ferrous metals, based on ferro-silicon, which contain more than 55 percent silicon by weight (HS 720221).

In addition, chemicals—Chapters 28 to 38 of the WCO Harmonized System of nomenclature—can realize an additional US$29.4 million while spices (cardamom) can generate an additional US$11.5 million. It should be noted that these products are already among Bhutan’s top exports. Thus, it will be useful to identify other sectors that can be promoted for exports to further diversify Bhutan’s export markets and avoid dependence on a handful of products.
The markets with the greatest potential for Bhutan’s ferrous metals exports are India, Italy and Germany. Of the three, India shows the largest absolute difference between potential and actual exports in value terms, leaving room to realize additional exports worth US$123.1 million while untapped potential in Italy and Germany is estimated at US$1.2 million and US$351,600, respectively.

There are 15 additional export products with high potential identified by the Committee for Development Policy (CDP): dairy (04), apiculture (0409), horticulture (07), potatoes (070190), apples (0808), mandarins (080510), medicinal plants (12), cordyceps (210690), mineral water (220110), animal feed (23), plastic film (392099), particle board (4410), building stone (680221), iron ingots (720610) and copper wire (740819). Other products, such as red rice, mushroom (matsutake), processed food products, fruit juices, mineral water, hazelnuts, lemongrass products and organic soap and related products have been identified to have huge export potential though export values are not substantial.

6.4.2 Services

The services sector continues to grow, including those delivered by companies at Thimphu TechPark, which forms a small but growing source of employment and economic activity near the capital (see Chapter 7). Bhutan has increasingly benefited from a tourism and hospitality industry based on the country’s history, landscape and largely unspoiled natural environment. Again, a notable characteristic of tourism development in Bhutan is the alignment with its natural vision. To minimize negative environmental and cultural impacts associated with mass tourism, the government decided to limit visitor numbers and appropriate part of the corresponding economic rents.

Bhutan should continue to benefit from an active services promotion strategy, broadening the range of services companies operating in the country and using ICT to facilitate and complement this expansion. While the main topic of this chapter is export diversification, exports cannot be separated from investment strategy, since the attraction of FDI in this area is inseparable from services exports.

An efficient ICT sector opens up new export possibilities, particularly to landlocked countries traditionally constrained by high transport costs. The adoption of ICTs enables specific services (and goods) to be traded or offshored without the need for traditional transport. Bhutan can learn from the rise in call centres, online programmers and software developers in India, which were offshored from developed countries but some of which India may even offshore itself (and some of which are currently represented at Thimphu TechPark). Value-added in exports of services increased Indian GDP growth by 0.2 to 0.6 percentage points annually over the 1980s and 1990s; similarly, the IT-enabled services (ITeS) sector in Mauritius is a later example of success, booming in the early 2000s onwards.

The three main elements of services offshoring activities are Information Technology Outsourcing (ITO), Business Process Outsourcing (BPO) and Knowledge Process Outsourcing (KPO). Bhutan can benefit from each of these three developments. The ITO segment has four categories: software research and development, IT consulting, software, and infrastructure. The BPO segment contains three main categories: enterprise resource management, human resource management and customer relationship management. The KPO segment includes business consulting, business analytics, market intelligence and legal services (Commonwealth Secretariat, n.d.).

Each of the various activities or services tasks under the ITO, BPO and KPO value chains represents a different level of value addition. For example, software R&D adds more value than network management in the ITO value chain. Likewise, finance and accounting add more value than document management in the BPO services value chain. Business consulting adds more value than market intelligence in the KPO services value chain. Bhutan’s challenge is initially to attract any kind of export-oriented investment in each of these areas, using its initial successes to attract foreign firms. Being too selective risks failing to attract the required business interest. The task is thus to cover a larger number of related activities in the services value chain as well as moving up the value chain.

Low value-added jobs are just as important for poverty alleviation as high value-adding employment, especially for a country such as Bhutan which is only just embarking on its first attempts to capture services tasks. Often, low-value jobs are the first step towards gaining participation in global value chains. For example, since 1997, Intel has operated in Costa Rica, employing more than 2,000 employees in the design, prototyping, testing and validation of integrated circuit and software solutions, providing finance, human resources, procurement, and sales and marketing support. Costa Rica has been able to participate in global value chains to advance its own development, beginning with insertion into a global value chain at the lower end with the objective of job creation, poverty alleviation and skills training and subsequently being able to move into higher areas.

Other opportunities for services offshoring to Bhutan exist in sectors such as law and health services. In health care, examples include India, South Africa, China and Brazil in medical tourism, countries which exploited a cost and quality advantage. In certain niche areas, Bhutan may be able to learn from these examples. The Philippines trades nursing services via temporary migration of health personnel. Filipino nurses make up three quarters of foreign nurse graduates in the United States. Although remittances are unimportant in Bhutan, partly because the labour force is too small, it may become important for medical personnel to travel abroad to train and improve skills if a health care hub is planned, as suggested in some consultations. While these exports can earn important foreign exchange, trade must complement the provision of universal health coverage. Thus, domestic regulation can enhance welfare even if it restricts trade.

### 6.4.3 Potential impact of graduation on diversification

For current major products, diversifying into other markets is not likely to be affected by a possible loss of preferential tariffs (non bold red numbers in non-shaded cells in Table 6.1). For the EU, tariff rates under the GSP would still be zero for cardamom and cement products, for instance. For Hong Kong and Singapore, MFN rates are zero for all the major export products of Bhutan. In the case of Thailand, the tariff rates are either not covered by GSP-LDC (cardamom and cement) or are zero under the MFN regime (dolomite, gypsum and silicon).

On the other hand, Bhutan’s efforts to diversify into potential priority exports may be limited by the possible increase in duties after its graduation (see italic red numbers in Table 6.1). For example, after graduation, Bhutan will lose eligibility for EBA (GSP-LDC) of EU after a transition period, most likely in 2026 and become eligible for regular GSP and possibly for GSP+, if it meets some additional conditionalities. The average tariff rate would jump from 0 percent under EBA to 55.3 percent after graduation, when Bhutan is applied with regular GSP or MFN by the EU, depending on products. Changes in tariff rates on specific products within the dairy product group vary considerably, for instance, 2.4 percent for bird’s eggs (GSP), 141 percent for some types of buttermilk (GSP) and 202 percent for whey protein product (MFN, not covered by GSP). Tariff changes in the EU after Bhutan’s graduation are generally high for agricultural products.
MFN tariff rates imposed by Thailand on many agricultural products are significantly higher than those under the GSP-LDC scheme. Bhutan may find difficulties in exporting poultry, dairy, honey, vegetables and fruits to Thailand, if it loses trade preference after graduation.

To summarize, for existing major exports such as cement and steel, diversifying into new markets, e.g. the EU, Hong Kong SAR, Nepal, Singapore and Thailand, is not likely to be affected by graduation, because tariff rates will remain around the same level. Diversifying to potential export products, such as dairy, vegetables and fruits, would not be affected by graduation for main destinations, including Bangladesh, India and Nepal. But potential export products may face higher tariffs in the EU and Thailand after graduation.

Many of the preferential market access destinations do not have provisions for smooth transition, while some have ad hoc arrangements after countries graduate. The only GSP scheme for LDCs that has a predetermined transition period is the EU’s EBA programme which grants a transitional period of at least three years, while actual application of this provision varies country by country.

**6.4.4 Linkages**

A forward linkage is when investment in a particular project encourages investment in subsequent stages of production. A backward linkage is when a project encourages investment in facilities that enable the project to succeed. Linkages include backward linkages with suppliers, linkages with technology partners, forward linkages with customers and other spillover effects. Linkages are often lacking because local firms cannot meet international production standards, as well as corporate requirements in terms of consistency and continuity and volumes of production.

Linkages are important both between domestic companies and between foreign companies and smaller local companies. Given that the development of hydropower risks Bhutan leaning towards a further concentration of economic activity and exports, an explicit linkages development policy would be appropriate.

The higher the total number of linkages, the better the spin-off effect on the national economy. In a situation such as Bhutan’s where foreign investment is relatively low, linkages can be an efficient way of stimulating domestic economic activity and generating some degree of import substitution.

A risk for Bhutan, as with any developing country, is that the plethora of micro- to small-sized businesses, particularly in rural areas, will remain disconnected from the wider domestic economy and in turn from global value chains. One common strategy, but one which is difficult to get right, is to consolidate products in a marketing-board type arrangement or a producers’ cooperative, which then sells the products to middlemen or direct exporters based in the capital or trading hubs. The Bhutan Association of Women Entrepreneurs (BAOWE) is engaged in marketing MSME products, with the idea of connecting with potential and global buyers and its activities should be supported and possibly expanded, given proven success in a small number of piloted products. BAOWE leadership and management have indicated the need for capacity-building support, including advice on marketing and branding, in conjunction with the implementation of Brand Bhutan.

Bhutan has been more successful in harnessing downstream linkages than upstream. The manufacturing of ferro-alloys is electricity intensive and requires locally available ores. Concentrated at Pasakha and Phuentsholing on the Indian border, ferro-alloys, ferro-silicone,
calcium carbide, manganese and silicon carbide together have in recent years comprised half of exports (the destination being India) and over 10 percent of GDP, although the contribution is declining as a result of a fall in world prices. Bhutan is somewhat unique among small LDCs in that its economic growth has relied to some extent on mid-level manufacturing.

Linkages can be enhanced in hydro and downstream processing. This could include suppliers of machinery, tools, accessories, packaging materials, logistics, distributions and marketing. Indirect examples are supporting services such as cleaning services, caterers, insurance companies, housing, consulting services and training centres.

In hydro and other large-scale investments, the largest ongoing operating expenses are for fuel used in machinery and equipment; utilities; food services; and machinery and maintenance services. In the short to medium term, it may be that opportunities for the development of domestic activities to service the mining companies are machinery maintenance, training technical personnel in a wide range of capacities, including business services, accounting and safety standards. In the long run, there may be possibilities in high-value agricultural activities like organic fruit and vegetables and agro-processing industries whose products are in demand by local companies. The agricultural industry may also supply generally to other industries.

Four types of activity are involved in the development of linkages:

i. **Technological upgrading**, including partnership with foreign affiliates, incentives for R&D cooperation, home country incentives and the promotion of suppliers’ associations.

ii. **Training**, including collaboration with the private sector on a one-stop service, support for private sector training programmes and collaboration with international agencies.

iii. **Information and matchmaking**, including the provision of relevant information, maintenance of updated electronic databases, acting as an honest broker in negotiations, support for suppliers’ audits, the provision of advice on subcontracting, sponsorship of fairs, exhibitions and conferences, and the organization of meetings and visits to plants.

iv. **Financial assistance**, including legal protection against unfair contractual arrangements and other unfair business practices; the guarantee of recovery of delayed payments; indirect financing to suppliers through their buyers; tax credits and other fiscal benefits to firms providing long-term funds to suppliers; co-financing for development programmes with the private sector; the direct provision of finance to local firms; loans and the use of official development assistance (ODA).

Thailand’s Board of Investment Unit for Industrial Linkage Development (BUILD)\(^{102}\) is a good example of these ideas in practice. It supplies a range of investment-related services, acting as a middleman to develop links between customers and suppliers. The programme uses technology transfer to reduce imports of parts and components, linking Thai suppliers with large companies and strengthening domestic part makers, promoting industrial linkages and stimulating domestic subcontracting of parts and components. The unit analyses parts and components needed by both Thai and foreign assemblers planning to start production in Thailand. BUILD then surveys existing supplier industries in order to identify companies that are capable of producing competitively. The programme also collaborates with other government agencies and private firms to help these potential suppliers to upgrade.

BUILD consists of several programmes. The Vendors Meet Customers Program was established to promote industrial linkages and stimulate domestic subcontracting of parts and components. It involves visits of manufacturers to factories. A monthly “Parts and Components

Marketplace” aims to match customers and suppliers. Every month, BUILD invites 10 to 20 large companies and 200 to 300 potential qualified suppliers from a computerized database of supporting industries that includes about 800 companies believed to be capable of producing parts for parent firms. The marketplace consists of a morning seminar on different issues, e.g. increasing efficiency, a presentation by potential customers on their supply demands, an exhibition of the parts needed, open discussions and opportunities for informal meetings. Subcontracting seminars provide SMEs with information on how to overcome difficulties in supplying large companies. The ASEAN Supporting Industry Database includes all important industries in the fields of mould-and-die, electronics, automotive and chemistry in Asia and aims at facilitating matching in the ASEAN region.

6.4.5 Import substitution

In the aftermath of COVID-19, with the likely shortening of global supply chains and possible disruptions to international trade, import substitution will become increasingly relevant and indeed may become a necessity if the import of certain goods is cut off. Any import substitution possibilities driven by COVID-19 place yet further emphasis on the importance of developing productive capacity, or measures to boost supply.

In 2019, the Ministry of Economic Affairs (MoEA) conducted the “Report on Import Substitution Possibilities,” a comprehensive study reviewing all imported items and further analysing products that had an import value of more than BTN 3 million per annum. The areas covered by the report are:
- Livestock
- Agriculture
- Prepared and processed fruit and vegetables
- Processed foods
- Pharmaceutical products
- Plastics and wood products
- Textiles
- Prefabricated products
- Footwear
- Electrical machinery and accessories
- Motor vehicles
- Cooking and heating

From this list, a preliminary list of 56 products was established, covering all sectors, with the idea that some of these may be commercialized by the private sector. Most of the policy recommendations made in the report are highly relevant and should be put into practice. The main recommendations for import substitution include the promotion and support of commercial crop farming, adoption of the farm-to-table model and enhancement of farm–industry linkages. The government is urged to consider feasibility studies and to offer better business infrastructure, fiscal support and incentives.

Broadly the report is well-conceived and useful, with some sensible policy suggestions. However, no consideration is given to comparative advantage, or Bhutan’s efficiency in making one of the recommended products relative to others, compared with the ability of other countries to produce that product relative to international costs. This is important, because the major criticism of past models of import substitution is that governments pursuing such a strategy protected and spent considerable funds on industries which turned out to be inefficient because they were making items which could be produced more cheaply, often
at higher quality, elsewhere. It has been suggested that this is primarily because national companies were not exposed to international competition. The successful East Asian emphasis on export promotion is thus contrasted with the less-successful Latin American experience of import substitution industrialization.

If Bhutan promotes its own production via major protective barriers, particularly high value-adding industrial or mechanical products, it may similarly risk the entrenchment of inefficient or low-standard goods. For example, with its limited labour force and absence of history in manufacturing, Bhutan is unlikely to ever be able to compete in the production of motor vehicles. A similar observation may be made about electrical machinery and accessories. Labour costs may be too high relative to competitors even for efficient production of footwear or textiles. Bhutan's minimum wage is around US$100 a month for unskilled workers—higher than some regional competitors—and US$150 for the highest skill level. There would be little reason, for example, for a multinational corporation currently sourcing ready-made garments from Bangladesh to diversify into landlocked Bhutan, which has no history in garment production, has a much smaller labour force and is no cheaper.

However, the global consensus among development economists is rightly shifting towards greater acceptance of sensible import substitution possibilities. While import substitution industrialization will not be possible, there may be potential for import substitution in standard products already produced naturally in Bhutan, particularly in the agricultural sector, where value-addition may be limited, linkages to the wider economy are possible, unit labour costs are lower and the country already has some experience (and often considerable traditional experience). Of the 56 shortlisted products mentioned in the report, this would probably limit the true potential to only around the first 40, which cover processed agricultural products and some other basic processed items but exclude the more complex industrial or processed items (see Annex to Chapter 6). If the government were to support any of these items with incentives, via taxes or subsidies, it should be those with the highest actual and dynamic potential comparative advantage possibilities, of course taking into account other factors such as GNH. As the report suggests, feasibility studies would need to be conducted and a formal comparative advantage study undertaken, giving some indication of the various possibilities for government support.

One area which combines both potential strong linkages and a realistic chance of import substitution in agriculture is the farm-to-table model, which is gaining popularity in several parts of the world and which may be a profitable source of linkages between tourism and farming.

Box 6.4: Farm-to-table

The concept of “farm-to-table” is serving local food at restaurants by buying direct from producers such as breweries, farms and fishers. This may be via direct sales, a farmer’s market, community arrangements, a local distributor or by the restaurant growing its own food. The idea has become more popular as people become more aware of food safety, freshness and seasonality, gaining support because of the promotion of fresh, local ingredients. Flavours and nutrition are considered better when products are sourced locally. Food traceability means that the food’s origin is identified to consumers. Many consumers are also wary of the risks of centralized food growing and prefer to eat locally grown produce.

There may be direct compatibility of this concept with the Bhutanese tourist market, which features relatively high-spending consumers with a natural propensity towards ethically produced, healthy produce with minimal environmental impact. The concept also fits well with the GNH ethos. Support for local small-scale farms can create more local jobs and create more plant variety, potentially improving soil quality. Crop diversity can reduce pests, cutting the need for pesticides. As acknowledged in the MoEA Report on Import Substitution Possibilities (2019), commercial
horticulture uses chemicals to boost production and control pests. There have been reports of the prevalence of high levels of chemicals in some imported fruits and vegetables. Farm-to-table is therefore also justified partly by a growing preference for domestic produce. The kind of small-scale farming used in farm-to-table may also fit Bhutanese farming techniques, which are often small-scale and locally oriented. There is little scope for mass, industrialized methods. Organic production has particular potential given the small-scale, traditional methods used by Bhutanese farmers and the higher potential remuneration from such products.

Despite the growth of farm-to-table, it has been met with some criticism. It is more expensive and consumers may not always fully understand what it means. The nutritional content may not be much higher despite the product being grown closer to home. While pollution can be lower because fewer emissions are produced in transport, the overall impact on the climate may not necessarily be lower if other energy-intensive or polluting techniques are used in production, such as heating or fertilizers. For example, the energy externalities used for heating greenhouses may outweigh the cost of pollution in air freight. This necessitates an accurate cost–benefit analysis of various supply chains and a precise commodity-by-commodity analysis of each case.

A basic overall analysis of the possibilities for farm-to-table suggest that it can complement the tourism industry and provide a source of import substitution and that selected, well-placed farms and restaurants may benefit. However, it will not be a source of structural transformation or broad-based development. The overall potential is limited due to the small size of the Bhutanese market and the limited number of restaurants. Compared with the export of goods and services, the aggregate impact on the economy is likely to be small, even if the model supports local farmers, hotels and restaurants.

Estimates suggest that the food and beverage market in Bhutan could be worth tens of millions of dollars. A small proportion of this may be captured by farm-to-table, making this a promising but niche activity that could become part of the tourism offering, which may contribute to import substitution but not substantially to overall economic growth.

As noted, dependency on India exposes Bhutan to potential volatility and to currency risks. Given the absence of success in diversification so far, especially since the DTIS 2012, rather than devote continued effort and expense to geographic diversification, it may be better to focus more on product diversification in appropriate areas. The main drivers of economic activity remain the production and export of hydropower-produced electricity, ferro-alloys (which, however, are in decline) and tourism. Bhutan is a relatively capital-rich, labour-poor (by quantity not skills) country with a small domestic market. This places relative emphasis on capital-intensive, high-productivity, skills-rich export activities. Low-productivity, low-wage agricultural activities, particularly those serving the domestic market, have less potential. Particular opportunity exists in ICT-enabled services, not only as exports in themselves but as infrastructure and sources of linkages. The success of Thimphu TechPark so far illustrates this point. ICT-enabled services have the advantage of a potentially unlimited overseas market, often low start-up costs, rapid upskilling potential, compatibility with sustainable development and increasing importance in the more virtual, post-COVID world.

In attempting to achieve this transition, it is recommended that a “binding constraints” approach be adopted rather than a horizontal approach under which all obstacles to trade diversification are addressed at once. In brief, while a horizontal approach may be too ambitious and can lead to failure and despondence among policymakers, the idea of addressing binding constraints one by one involves tackling particular challenges such as finance, transport and labour productivity, so as to achieve relatively rapid, if limited, progress and subsequently learn lessons for the wider economy. Examples from countries as diverse as the Republic of Korea, Tunisia and Viet Nam show that an industrialization-oriented, export-promotion policy
stance has proven more successful than one which focuses on improvements to the business environment. This approach is compatible with the industrial parks, or special economic zoning model currently at an early stage in Bhutan.

### 6.5.1 Improve data

This recommendation remains relevant since the original DTIS 2012 and unfortunately not enough has been done to improve data on either trade or investment. Broadly, data on trade and investment need to be improved by developing the government’s capacity to generate, analyse and disseminate statistical information, making it immediately available online and ensuring harmonization between national and international sources. Interministerial coordination of data is in some cases lacking and international and national sources of data conflict – particularly in FDI. Resolving this data conflict should be a priority as it severely undermines attempts to monitor and generate policy and can prove a deterrent to foreign investors. The cost of full statistics, legal changes, capacity-building and institutional strengthening in other small LDCs can range from US$1 million to US$10 million, supported by international agencies such as the World Bank, IMF and other UN entities in their respective areas. Support should include institutional strengthening; infrastructure development, including installation of systems, training and implementation; capacity-building with the aim of ensuring that officials are systematically trained to generate and use data; and dissemination. Government officials in areas other than trade may require statistical training and help in understanding trade and macroeconomic data.

### 6.5.2 Consider introducing a sterilization fund

Although current macroeconomic conditions are relatively benign, this is not guaranteed in the future and reliance on the Indian rupee is unlikely to diminish in the near to medium-term. The government may wish to consider the introduction of a stabilization fund to counteract the effect of natural resource flows and stabilize the credit and money supply. Such a fund could receive rupee inflows and pay for necessary imports and interest on hydropower loans, without channelling these flows through the domestic banking system. Any reduction in seigniorage as a source of government revenue would be small in comparison.

### 6.5.3 Develop a dedicated linkages programme

The RGoB and the private sector may wish to work together to establish a one-stop centre, where entrepreneurs have access to business development services and inputs (i.e. entrepreneurship training, information, finance, quality control, networking and business counselling).

Local supplier upgrading programmes in technology and skills can help stimulate linkages between local firms and transnational corporations. Under these programmes, some local firms have subsequently developed into exporters themselves.

Bhutan is rightly encouraging foreign and domestic firms to collaborate with other stakeholders in enhancing the level of skills, technology and infrastructure in Bhutan, although it may be worth simplifying these incentives in order to reduce anomalies and make the scheme easier for foreign and domestic investors to understand. In the past, host governments have used direct measures such as local content, export performance and transfer of technology requirements. Unlike many countries, Bhutan can use these measures as it is not a member of the WTO, under which they are curtailed.
6.5.4 Establish an Economic Development Board

This recommendation remains relevant since the original DTIS 2012 and could even be combined with a linkages one-stop centre. The board would operate as a statutory body semi-autonomously from government, with the mandate of promoting investment and exports and enhancing Bhutan's ability to benefit from trade. The Bhutanese Economic Development Board would perform activities such as training in trade and investment for all Ministries and relevant agencies; conducting policy advocacy; image building and investor targeting and aftercare; and trade promotion using the latest techniques; as well as reducing bureaucratic barriers to domestic and foreign investment. A dedicated institution, fully staffed, would address these aims as well as possibly helping improve economic statistics.

Technical leadership would come from the existing Departments of Trade and the Department of Industry (ideally, the divisions of investment and trade promotion would be replaced, rather than creating a separate institution), as well as from the Ministry of Agriculture; the Tourism Council of Bhutan; the Royal Monetary Authority of Bhutan and the Private Sector Committee. Private sector representatives could attend meetings of the Board. Singapore’s Economic Development Board could serve as a model.

6.5.5 Ensure continued market access

After LDC graduation, it will be important to maintain market access, even in new areas which are currently less important. The government should carefully consider the unintended consequences of bilateral trade agreements and continue to weigh up the disadvantages of bilateral and regional agreements versus WTO accession. Overall, it would be desirable to avoid a complex web of agreements which artificially distorted Bhutan's trade relations. Greater use can be made of the GSP and EBA schemes. Dissemination of information to the private sector may help, as well as training in export documentation. The government should continue progress towards passing the conventions necessary for GSP+ as a possible partial replacement for EBA after LDC graduation.
Annex to Chapter 6: Products with import substitution potential

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<td>Chicken</td>
<td>Enhance poultry farming</td>
<td>Processing and packaging of chicken products</td>
<td>To add value and meet demand for specific products</td>
</tr>
<tr>
<td>Fish</td>
<td>Fishery farming</td>
<td>Enhance domestic production</td>
<td>To meet domestic demand gradually</td>
</tr>
<tr>
<td>Milk and milk products</td>
<td>Enhance diary and milk processing units</td>
<td>I. Dairy Farming</td>
<td>To foster capacity utilization of existing processing units as well as to meet domestic demand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II. Milk processing units</td>
<td></td>
</tr>
<tr>
<td>Potato and potato-based products</td>
<td>Off-season cultivation</td>
<td>I. Off-season potato cultivation</td>
<td>Identify potential areas for off-season potato growing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II. Potato-based value-added products</td>
<td></td>
</tr>
<tr>
<td>Pea and lentils</td>
<td>Enhance production</td>
<td>Commercial farming of lentils</td>
<td>Support domestic packaging and marketing</td>
</tr>
<tr>
<td>Wheat and meslin</td>
<td>Enhance production</td>
<td>Commercial farming of wheat</td>
<td>- Build market linkages with distilleries and breweries - Lease of State Reserved Forest (SRF) land for commercial farming</td>
</tr>
<tr>
<td>Maize and paddy</td>
<td>Enhance production</td>
<td>Commercial farming of maize and paddy</td>
<td>Improved seed, subsidized fertilizer and machineries and lease SRF land for commercial farming</td>
</tr>
<tr>
<td>Bamboo and bamboo charcoal</td>
<td>Enhance production</td>
<td>Bamboo growing for construction industry</td>
<td>Identify potential areas and bamboo species for large-scale production enhancement</td>
</tr>
<tr>
<td>Animal feeds</td>
<td>Enhance production</td>
<td>Additional feed industries</td>
<td>Promotion and support</td>
</tr>
<tr>
<td>Tomato and processed tomatoes</td>
<td>Enhance tomato production</td>
<td>Tomato juice</td>
<td>Market linkage and production support</td>
</tr>
<tr>
<td>Fruits and preserved fruits</td>
<td>Diversify and enhance fruit production</td>
<td>I. Fruit preservation</td>
<td>Market linkage and production support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II. Fresh fruit marketing in domestic market</td>
<td></td>
</tr>
<tr>
<td>Sugar</td>
<td>Commercial-scale sugar cane plantation</td>
<td>Sugar production</td>
<td>Lease of SRF land and support</td>
</tr>
<tr>
<td>Noodles and similar products</td>
<td>Enhance domestic production</td>
<td>Differentiated noodles based on domestic cereals like buckwheat</td>
<td>Promote buckwheat production</td>
</tr>
<tr>
<td>Pastries and cake</td>
<td>Enhance and diversify domestic production</td>
<td>Bakeries (in unserved areas)</td>
<td>Identify unserved locations and promote</td>
</tr>
<tr>
<td>Ice cream</td>
<td>Domestic ice cream units</td>
<td>Ice cream production</td>
<td>Small-scale activities based on demand</td>
</tr>
<tr>
<td>Category</td>
<td>Action</td>
<td>Sub-category</td>
<td>Activities</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------------------</td>
<td>--------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sausages</td>
<td>Domestic sausage making units</td>
<td>Sausages production</td>
<td>Small-scale activities based on demand</td>
</tr>
<tr>
<td>Sauces</td>
<td>Enhance and diversify production</td>
<td>Sauce-making based on domestic produce</td>
<td>Small-scale activities based on demand</td>
</tr>
<tr>
<td>Confectionary</td>
<td>Enhance and diversify production</td>
<td>Bhutanese sweets and chocolates</td>
<td>Small-scale activities</td>
</tr>
<tr>
<td>Puffed rice</td>
<td>Enhance production</td>
<td>Puffed rice units</td>
<td>Small-scale activities based on demand</td>
</tr>
<tr>
<td>Soups and broths</td>
<td>Production based on domestic produce</td>
<td>Mushroom soups</td>
<td>Small-scale activities based on demand</td>
</tr>
<tr>
<td>Fruit and vegetable juice</td>
<td>Enhance and diversify production</td>
<td>Tomato juice</td>
<td>Currently not produced in the country</td>
</tr>
<tr>
<td>Silica sand and quartz sand</td>
<td>Supply of sand in unserved area</td>
<td>Reach out to unserved areas</td>
<td>Identify the locations and direct NRDCL for supply</td>
</tr>
<tr>
<td>Quart and quartzite</td>
<td>Identify high-grade quartzite</td>
<td>Exploration of ferro-silicon grade quartzite</td>
<td>Prioritize exploration of high-grade quartzite</td>
</tr>
<tr>
<td>Construction aggregates</td>
<td>Supply of aggregates in unserved area</td>
<td>Stone crushing units in unserved areas</td>
<td>Identify location and allocate quarry or surface collection</td>
</tr>
<tr>
<td>Clinker</td>
<td>Market linkage</td>
<td>I. Establish new clinker unit II. Market linkage of domestic clinker to cement plants</td>
<td>Identify limestone mine for clinker production and market linkages</td>
</tr>
<tr>
<td>White cement</td>
<td>Production of white cement</td>
<td>White cement manufacturing</td>
<td>Identify limestone mine for white cement</td>
</tr>
<tr>
<td>Tiles</td>
<td>Stoneware tiles</td>
<td>Tiles manufacturing</td>
<td>Feasibility study</td>
</tr>
<tr>
<td>Granite</td>
<td>Enhance production</td>
<td>Granite slabs</td>
<td>Study other potential deposits</td>
</tr>
</tbody>
</table>
| Building blocks and bricks | Enhance production                   | Additional AAC block units                        | -Assess strength of the AAC block for use in various constructions  
                                                                 | -Promote use of AAC blocks                                                 |
| Waste and scrap of caste iron | Sorting of domestic scrap | Supply of domestic iron scraps to industries directly | Market linkage                                                              |
| Pharmaceutical products | Diversification for domestic market and exports | Manufacture of pharmaceutical products | Study potential for new pharmaceutical products not produced in the country |
| Essential oil        | Enhance local production              | Diversify essential oil production               | Identify potential new products based on domestic resources                |
| Soaps                | Enhance domestic production           | Diversify soap production                        | Cottage-scale soap production taking place.                                |
| Fittings, boxes and related products | Enhance and diversify domestic production especially in plumbing, fittings and containers | Manufacture of plastic fitting and containers | Housing sector expected to continue expanding, thus domestic demand will continue to increase. |
| Charcoal             | Production of wood charcoal from lops and tops | Plantation and production of charcoal              | -NRDCL could manufacture and supply charcoal from lops and tops  
<pre><code>                                                             | -Feasibility study for plantation and production of fast-growing plants   |
</code></pre>
<p>| Corrugated and non-corrugated products | Enhance domestic production | Corrugated box-making units                      | Large supply gap currently met from imports.                                |
| Exercise books and similar products | Enhance and diversify domestic production | Exercise books and office stationary units       | Small-scale activities                                                     |</p>
<table>
<thead>
<tr>
<th>Product</th>
<th>Action Needed</th>
<th>Current Situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Envelope</td>
<td>Enhance and diversify domestic production</td>
<td>Small-scale envelope-making units</td>
</tr>
<tr>
<td>Sanitary tissues</td>
<td>Enhance and diversify domestic production</td>
<td>Sanitary paper and tissue-making units</td>
</tr>
<tr>
<td>Woven fabrics</td>
<td>Promote domestic textile units</td>
<td>Cotton woven fabrics production</td>
</tr>
<tr>
<td>Garments</td>
<td>Enhance and diversify local production</td>
<td>School uniforms and Bhutanese garments</td>
</tr>
<tr>
<td>Sanitary towels</td>
<td>Promote domestic units</td>
<td>Manufacture of sanitary towels</td>
</tr>
<tr>
<td>Pillow and quilts</td>
<td>Enhance local production</td>
<td>Small-scale production units</td>
</tr>
<tr>
<td>Curtain, blinds,</td>
<td>Enhance domestic skills and production</td>
<td>Stitching of curtains, blind, packaging materials</td>
</tr>
<tr>
<td>Pre-fabricated building parts</td>
<td>Ready to assemble building components</td>
<td>Pre-fabricated building components</td>
</tr>
<tr>
<td>Furniture</td>
<td>Enhance and diversify local production</td>
<td>Furniture units</td>
</tr>
<tr>
<td>Footwear</td>
<td>Enhance local production</td>
<td>School shoes–making units</td>
</tr>
<tr>
<td>Hydraulic turbines and regulators</td>
<td>Enhance local production</td>
<td>Diversify production in BHSL</td>
</tr>
<tr>
<td>Bridge and bridge section</td>
<td>Assess demand and feasibility</td>
<td>Production of bridge components</td>
</tr>
<tr>
<td>Towers and lattice masts</td>
<td>For hydropower sector</td>
<td>Manufacture of transmission towers and conductors</td>
</tr>
<tr>
<td>Electric control boards/panels and electrical transformers</td>
<td>Assess project feasibility</td>
<td>Manufacture of transformers</td>
</tr>
<tr>
<td>Electrical lamps and fittings</td>
<td>No domestic production</td>
<td>Study feasibility of electrical fittings and accessories</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>Use alternative energy</td>
<td>i. Electricity-driven mass urban transport</td>
</tr>
<tr>
<td>Cook and heating fuels</td>
<td>Electricity and biogas</td>
<td>i. Production of efficient electric stoves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Continue promotion of biogas</td>
</tr>
</tbody>
</table>

References


UN DESA (2017). Building productive capacity for LDC graduation in Bhutan.
CHAPTER 7
BRAND BHUTAN, EXPORT AND INVESTMENT PROMOTION
7.1 Introduction

As mentioned in Chapter 6, the strong sense of national vision associated with Gross National Happiness (GNH) has played a key role in the development of productive capacity and export development in Bhutan. Brand Bhutan, export and investment promotion can also benefit from this powerful national vision. GNH has intrinsic benefits. Economic growth is seen as a means to an end rather than an end in itself and growth is sacrificed if it harms the worst-off or damages the natural environment. This means that human development is in effect the highest priority rather than aggregate economic expansion, which is often a misleading development indicator. To external audiences, both consumers and investors, GNH marks Bhutan as different from the norm.

A further advantage of GNH is that policies are centralized and legitimized and tailored to the national context based on national consensus. In some least developed countries (LDCs), infrastructure development has been hindered by the unwillingness of affected communities to allow the building of roads and electricity networks in their areas or regions, in part due to their perception that the central government does not represent their interests. The Bhutanese emphasis on GNH promotes a national vision around which people can agree, even if some may lose out in the short run. This strong process of state legitimation plays an important role in facilitating active measures to build exports and attract investment. It also makes Brand Bhutan authentic and integrated with this entrenched national vision, which in turn helps with the implementation of investment policy. Government officials, civil society and private sector representatives do not need to be micro-managed towards particular goals; they have mostly already internalized the national vision and know in which direction to direct their efforts.

While this chapter primarily discusses investment, it also implicitly covers export promotion, given the links between the two. Export diversification by product or destination is more likely if it is conducted by foreign investors, who have market knowledge and ready access to supply chains and technology for production at scale.

7.2 Implementation of Brand Bhutan

Implementation of any brand strategy relies on a strong product. Powerful messaging, packaging or sales techniques require an underlying service or product with existing or potentially strong demand. Added to this, the increasing consensus among many contemporary development economists, supported by research from UN entities such as the CDP and UNCTAD, is that productive capacity precedes export growth. In other words, it is not international market access or demand that stimulates domestic production; rather the other way around. The development of a quality product in sufficient quantity and quality precedes the identification of market opportunities and sales. This means that during the full rollout of Brand Bhutan, the government and private sector must be completely clear on what products and services they are promoting and that these products or services can be delivered at high quality and in sufficient consistency and volume. Similarly, investment possibilities must be realistic and ready to execute, based on solid analysis and accompanied by good infrastructure.

There is no point in developing a product that no one wants to buy, but there is even less point in devoting major energy into sophisticated marketing techniques without a quality offering that can be produced in sufficient volume and consistency. Essentially, LDCs face almost unlimited demand for their products. It is not the demand side that is the critical
challenge. It is supply. For this reason, the Brand Bhutan concept sensibly centres around actual products and services (until now, largely tourism) that international consumers wish to purchase—and Brand Bhutan leverages the Gross National Happiness concept, which has increasing credibility and interest internationally. It will remain extremely important to link marketing efforts with the development of productive capacity—most likely in niche areas with highly developed products and services, particularly those that involve information and communications technology (ICT) or are ICT-enabled.

There is also a need to delineate different marketing strategies for various products—something that can be done best by private sector representatives in conjunction with the government. The entirety of Bhutan as a country cannot be encompassed within a single brand. For instance, the tourism offering carries a completely different image to electricity and hydropower, while agricultural exports are again different. While diversification into new products is the goal, it is also important to recognize that much of economic growth has historically been driven by unbranded industrial products and services such as ferro-alloys and electricity.

Bhutan has the opportunity to brand several exciting new areas, particularly in the creative economy, as recognized by the work of the International Trade Centre (ITC) on the Creative Industries Export Strategy 2020–2025. Creative industries can not only play a part in investment and export diversification, but Bhutanese creatives can also play a role in rolling out Brand Bhutan. The strategy makes a number of practical recommendations, some of the most relevant of which are establishing a creative industry managing unit; improving statistics and the legal framework on the creative industries; training and entrepreneurship in the creative industries; overseas promotion; and mentoring and overseas partnerships. Some of these recommendations also apply to areas other than the creative industries.

In 2006, a feasibility study on Brand Bhutan was conducted by the Department of Trade in conjunction with the World Intellectual Property Association (WIPA), which yielded positive results, suggesting that such a branding project should proceed. The recommendation was acknowledged in the DTIS 2012, the Economic Development Policy 2016 and the 12th Five Year Plan. Brand Bhutan was developed with the branding agency, FutureBrand, but has not yet been implemented due to a shortage of financial resources and human capacity constraints. To that end, a US$1.5 million Tier 2 Enhanced Integrated Framework (EIF) project was approved on 31 December 2019, on Brand Bhutan and Export Diversification. The project, whose execution has been delayed due to the impacts of COVID-19, aims to promote high-value, niche Bhutanese products using Brand Bhutan and to build the capacity of relevant stakeholders. It will be carried out by the National Implementation Unit and the Export Promotion Division in conjunction with an ongoing EU trade project and supported by the ITC in collaboration with other government agencies.

The Bhutan national brand documentation is a comprehensive set of marketing materials, logos and images, with guidance on their use. The brand in effect gives Bhutan a voice, through physical marketing, networking, social media and other means. But it is more than just a set of fonts, pictures and logos. It will only be successful if, in addition, the government and companies focus on creating a unique point of view in the marketplace of what Bhutan is, what it believes and why it matters. The idea should be to inspire loyalty, by differentiating Bhutan from competitors and drawing focus to the country’s unique qualities.

As mentioned, a strong logo and associated materials are alone not enough. Bhutan’s global connections and international presence depend on a brand implementation strategy. This will help the government to reveal its new brand in a way that is tactical, measurable and manageable. This means simplifying the brand launch, mitigating risk and improving the chances of it lasting over the long term.
The strategy for introducing Brand Bhutan should firstly include a schedule, including when and where the new brand will be launched, taking COVID-19 into account. It may be worth waiting until the pandemic is past its worst so that a series of physical events can take place, perhaps using Bhutan’s diplomatic missions’ presence in New York, London and Paris.

A communication plan needs to be developed for a variety of platforms, from websites and social media, to physical events and networking opportunities. This communications plan could even be linked to the possibility of leveraging LDC graduation (see Section 7.5 below), as well as investor targeting. A new web presence is critical, as acknowledged in the EIF project. At the time of writing, the site www.bhutan.gov.bt has not been updated and other key websites did not yet fully feature the brand and logo. Social media managers should be trained and given responsibility for Twitter, Facebook and Instagram, as well as possibly other channels. Such avenues are particularly important during the pandemic, given the absence of tourism and increased global use of social media during lockdown periods. Indeed, this kind of work is relatively inexpensive and straightforward and can reap dividends when investors and tourists start returning.

The external audience is not the only important feature. The whole of government, employees and local companies, especially in the tourism sector, also need to be fully briefed. Government employees and closely related companies will help ensure consistency in external campaigning. A national launch should take place prior to the external launch, with education on the vision and objectives. National buy-in is important for success.

Consistency will also be important, so that experiences in different areas, such as tourism or products, are similar. Consumers and investors need to understand what Brand Bhutan represents. The existing branding strategy is very strict on how it should be used, where and in what circumstances. It includes details like name, brand colours and typography choices.

The strategy should guide any decisions, highlighting the Bhutanese vision in a way that makes the country’s identity easy to define. The style guidance in the national branding strategy is very important, showing how to market and represent the country. Authenticity is particularly critical, so that tourists want to return for further visits and foreign companies want to remain for the long term. It will also make it easier to remain consistent over the long term.

Branding specialists recommend drawing up a plan for the brand launch, covering signage, environmental graphics, HR training and on-boarding material, recruiting collateral, sales collateral, promotional items, vehicle graphics and other areas. This should be divided into three levels. Level-one tasks cover lead generation and business development, which include the website, core business papers and electronic templates, solution overview sell sheets, leadership biographies, capabilities presentations, tradeshow booths and a governing brand guidelines document (which is already done). This should be started by the launch, with all tasks completed after six months.

Level-two tasks have moderate use in lead generation, business development and recruiting and include corporate envelopes, older but still relevant case studies, smaller tradeshow graphics such as pop-up banners, new hire on-boarding material and environmental graphics such as building logos, building and suite entrance signage and interior messaging and graphics.

103 Bhutan Brand Guidelines v1.0, April 2015
Level-three tasks, to be completed within two years, involve all other assets that can be replaced when the old material is depleted and material used with existing clients who will not be influenced by old branding. This includes items such as corporate thank you cards and envelopes, checks and invoice paper, older microsites still in use, client training material and core HR papers such as employee benefits package material and employee training material.

One of the main capacity needs is a dedicated training course in investment promotion, possibly conducted in association with UNCTAD and covering issues such as investment promotion, targeting and aftercare. This needs to cover all concerned stakeholders including at least the main missions in London, New York and Paris, as well as key government departments and ministries such as the Ministry of Foreign Affairs, Ministry of Economic Affairs, Ministry of Agriculture and Forests, Ministry of Finance, Ministry of Information and Communications and the Ministry of Labour and Human Resources. The idea would be to bring these ministries up to speed with basic investment concepts and techniques, so that they can implement Brand Bhutan effectively. Training should also be conducted on how to use Brand Bhutan, complemented by a launch strategy and communications plan. The 18 specific products listed in the EIF project should be used. A selection of high-quality products should be displayed and advertised at the launch, perhaps along the lines of the “Loubhoutan” concept undertaken by French designer Christian Louboutin.104

7.3 Foreign Direct Investment trends

Bhutan first adopted the Foreign Direct Investment (FDI) Policy in 2002. A new FDI Policy was issued in 2019, guided by the concept of its long-term development of maximizing Gross National Happiness. This is envisaged through the adoption of policies and programmes that operationalize the nine domains of GNH: living standards, health, education, good governance, ecological diversity and resilience, time use, psychological well-being, cultural diversity and resilience, and community vitality. FDI in both manufacturing and service sectors is now allowed, except for those as listed in the negative list. Accounting for changes in the economic and business environments, the 2019 FDI Policy aims to contribute to:

- The development of a green and sustainable economy
- Promotion of socially responsible and ecologically friendly industries
- Promotion of culturally and spiritually sensitive industries
- Promotion of Brand Bhutan
- Creation of a knowledge society
- Diversification of economy for exports and import substitution.

FDI inflows into Bhutan increased dramatically between 2011 and 2012 (Figure 7.1). For the next two years, it remained at US$22 million, primarily due to investments in hydropower projects;105 it fell drastically between 2015 and 2017. Personal remittances, which had been growing slowly, gained momentum in 2016 and have been maintaining the same pace ever since. In the last eight years, personal remittances have increased more than five-fold—from US$8 million in 2010 to US$48 million in 2018. After a decline in value in 2013, personal remittances as a percentage of GDP have steadily been increasing.

105 The Dagachhu Hydro Power Project is the lone FDI to date where inflows have been received and the upsurge in 2012 is probably due to that inflow.
As mentioned, one of Bhutan’s main assets is its high rate of domestic investment, which, in turn, is linked to hydropower investment. Whether investment remains at such a high level remains to be seen, but it is well above the LDC and developing country average and the foundation of solid future economic growth prospects. While not in itself the direct result of investment or export promotion activities, the functioning of the investment department of the MoEA has improved and plans have been floated for putting in place a dedicated investment promotion agency. Future activities must aim at diversifying beyond the hydropower sector and seeking new markets for niche products.

Policies aimed at opening up more to outside investment have been put in place with the 2019 Investment Law, which moves beyond the previously very strict legislation in place at the time of the 2012 DTIS. This move towards liberalization itself is unlikely to bring significant new incoming investment, but it at least allows more flexibility for investment and export promoters following the COVID-19 downturn. As noted in the text, FDI inflows have fallen despite these efforts and renewed, active efforts must be made to stem the decline.

Brand Bhutan is close to implementation, a positive development despite the slow progress of the last eight years. The concrete plans encompassed in the EIF Tier II project should result in rapid progress once project implementation begins. Other entities also have projects to support Brand Bhutan, including the Asian Development Bank, the Department of Micro and Small and Medium Sized Enterprises and the Agriculture Ministry, which is enacting a ‘Grown in Bhutan’ strategy.

Hydropower has driven investment over the last decade, driven by demand from India and largely because the industry is capital-intensive. As a result, the overall investment rate was extremely high but also volatile owing to the periodic inflows necessary for each hydro project. The share of total investment (from all sources, not just foreign) in GDP (see Figure 7.2) in 2011 and 2012, at nearly 70 percent of GDP, was the highest of any country in the world and in 2014, still the sixth largest. The rate of total domestic investment remains much higher than in other LDCs and forms an important source of strength for the future. The major investments also explain the high and volatile share of construction in GDP. The following figure shows the ratio of gross fixed capital formation to GDP since 2010, which in Bhutan has fallen but remains
higher than the world and LDC average. This is a positive feature of Bhutanese economic development that should be understood as an extremely valuable ongoing asset, since the rate of domestic investment is one of the key indicators of productive capacity development and structural transformation. Building infrastructure and constructing productive, physical investments are critical building blocks in the long-term development of economic capacity and productivity.

Figure 7.2: Investment rate, % GDP, 2010–2018

The major hydropower investments not only serve as a source of revenue, but also to make energy supply consistent and readily available, features which are lacking in many LDCs. Whereas around three quarters of electricity is exported to India, the availability of hydropower improves the domestic availability, accessibility and affordability of electricity. Although in 2003, only 40 percent of Bhutanese households had electricity access, the rate has increased to 99.6 percent for urban and 87.3 percent for rural households. The rural electrification rate stands at 95.5 percent, which is a remarkable achievement.

Despite the high overall investment rate from all sources, World Bank data show a decline in net FDI inflows since 2010, when the figure was US$75.3 million, with some degree of volatility in the subsequent years and a net outflow in 2017 (see Figures 7.4 and 7.5). In 2019, FDI is reported as US$13 million. Bhutanese sources, however, which exclude hydropower, are different, raising questions over some of the modeled data used in the World Bank estimates. In the same year, national data show incoming FDI at US$1,151 million ngultrum, or approximately US$15.7 million (see Table 7.1 and Figure 7.3).

Even taking into account the differences in calculation methods between World Bank and national sources, Bhutan has performed quite poorly in recent years, as noted in Figure 7.1 above. FDI inflows are now lower as a proportion of GDP than comparator countries such as Nepal, Bangladesh and the Lao People’s Democratic Republic, as well as the LDC average.

National data exclude hydropower despite it forming the largest single source of investment in recent years. Statistics compiled for this report, based on raw data provided by government, are shown below.
### Table 7.1: FDI inflows, BTN million

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of realized projects</th>
<th>No. of projects under construction</th>
<th>Value of realized FDI (BTN million)</th>
<th>Value of projects under construction (BTN million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4</td>
<td></td>
<td>609</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td></td>
<td>13,505</td>
<td></td>
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<tr>
<td>2012</td>
<td>6</td>
<td></td>
<td>5,047</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
<td>1</td>
<td>1,855</td>
<td>270</td>
</tr>
<tr>
<td>2014</td>
<td>5</td>
<td></td>
<td>477</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>3</td>
<td>1</td>
<td>1,190</td>
<td>3,116</td>
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<tr>
<td>2016</td>
<td>5</td>
<td></td>
<td>325</td>
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</tr>
<tr>
<td>2017</td>
<td>4</td>
<td>3</td>
<td>106</td>
<td>503</td>
</tr>
<tr>
<td>2018</td>
<td>7</td>
<td>8</td>
<td>1,761</td>
<td>3,783</td>
</tr>
<tr>
<td>2019</td>
<td>4</td>
<td>9</td>
<td>15</td>
<td>1,151</td>
</tr>
<tr>
<td>2020</td>
<td>7</td>
<td></td>
<td>3,404</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>4.7</td>
<td>4.8</td>
<td>2,488.9</td>
<td>1,764.7</td>
</tr>
</tbody>
</table>

*Source: RGoB*

### Figure 7.3: Incoming FDI, BTN million, 2010–2019

*Source: RGoB.*
The biggest difference was in 2011, when national figures show a level of US$175.6 million of FDI, compared with the World Bank’s quoted figure of US$75.3 million. After a significant decline in the intervening years, FDI recovered to US$22.9 million in 2019, again higher than the World Bank figure. It is also unclear whether the projects listed as “under construction” in 2013 and 2015 and later have been finalized are ongoing or active projects. In recent years, however, the data do appear to show that FDI has increasingly been in information technology–enabled services, including projects such as business process outsourcing and software development. This accompanied the growth of Thimphu TechPark and partially vindicates the associated government policies.

The discrepancy between these figures in itself needs to be rectified, as it makes it harder to track and put in place policies to promote and incentivize FDI, as well as extracting the main benefits from it. Accurate data are the first prerequisite for good, targeted policies.
Box 7.2: Impact of COVID-19 on investment and Brand Bhutan

It is too early to know from the official data whether COVID-19 will have a major impact on incoming FDI flows, although initial evidence suggests that it will. Of the 19 foreign companies listed as operating at Thimphu TechPark by August 2020, 6 had suspended operations, mostly because of the pandemic. On the positive side, it is unlikely that hydro investments will be significantly affected given their relatively low human resource intensity and the continued demand for electricity.

As noted, the rollout of the EIF Tier II project has been delayed due to COVID-19, although it now appears likely to proceed. As the epidemic proceeds, however, the urgency of operationalizing Brand Bhutan diminishes, given that demand for Bhutanese products and tourism will likely remain low in the coming months. That said, by continuing to put in place Brand Bhutan and improving the investment promotion institutional architecture during the downturn, the country may be able to position itself to benefit from the eventual global rebound.

7.4 Investment environment

The investment environment is one of the areas in which the most change has taken place since the DTIS 2012, with a range of restrictions removed, culminating in the 2019 investment policy which liberalized a number of areas, particularly in manufacturing, apart from the negative list. FDI is permitted in activities with a maximum foreign equity of 74 percent and minimum project cost of BTN 50 million (US$680,000) for manufacturing and BTN 25 million for services, with a number of provisos. FDI is also permitted in select small-scale production and manufacturing activities to foster new technology and skills and enhance market access. The minimum cost of these projects is BTN 5 million and the maximum foreign shareholding 49 percent. Considerable other work has been done, including an excellent investment strategy completed in 2020, which should be put into practice with ITC and EU support.

Investment is prioritized in the (i) Development of the green and sustainable economy; ii) Promotion of socially responsible and ecologically friendly industries; iii) Promotion of culturally and spiritually sensitive industries; iv) Promotion of Brand Bhutan; v) Creation of a knowledge society; and vi) Diversification of economy for exports and import substitution.

Such significant change has taken place and preparations in this area are so advanced that it is unrealistic to recommend considerably more liberalization or refinements to the investment environment per se (although better investor targeting and institutional improvements are recommended, as discussed below). On top of this, during the era of investment liberalization, FDI has actually declined. It is not primarily the domestic institutional structure or incentives that are the main challenges to attracting new FDI. What is a priority is not more restructuring of the domestic environment or further liberalization, but productive capacity-building and improvements to investor perceptions of the country, many of which will be created by leveraging existing success stories. Sustainable economic growth itself is one of the best ways of attracting outside investment.

According to the Bhutan Investment Strategy, the critical challenges are: (i) A weak legal, regulatory and institutional framework; (ii) Absence of structured investor targeting, investment promotion, facilitation and aftercare; and (iii) A relatively young and narrow private sector. As noted, (i) and (ii) have improved and it is in area (iii) that the most progress is possible. The most promising approach is not to address all horizontal obstacles at once, but to tackle particular binding constraints within a zone or industrial area, creating a more mature and broader private sector.
Box 7.3: Thimphu TechPark

Thimphu TechPark is a thriving government-run technology hub employing 19 mostly foreign companies, employing around 600 people, a small but growing proportion of Bhutan’s roughly 54,000-strong workforce. The park launched in 2012 with World Bank support, amid initial scepticism. A Singaporean investor, Assetz Property Group, pulled out after many of the commercial spaces continued to lie empty and one company suspended operations.

The RGoB initially tried to attract big, high-end foreign companies before skills had been proven and without good-enough infrastructure. Management skills and experience of IT export were in short supply. A fibre optic cable to India provided broadband fast enough for call centres but not for commercial high-bandwidth activities like video streaming.

It was only after the US online photo company Scan Café decided to ramp up its initial 20-strong pilot project in May 2013 that others followed: Bangladesh’s SouthTec Ltd, a software development outfit, and Secure Link Services from Switzerland. Firms specializing in telecoms, business process outsourcing and online data services moved in soon after. Scan Café grew to be the park’s biggest tenant, employing 530 workers who create photo albums from holiday snaps uploaded online. Foreign investors now originate from the United States, India, Australia, Bangladesh, Canada, Japan and Singapore (see Annex to Chapter 7).

The successful attraction of a quality company willing to test the waters signalled that Bhutan was a good place to do business. Most of the ingredients were already in place; they just had not yet been put to use in IT. Companies now operate in photo editing and photobook design, software development, IT support, data labelling and annotation to train machine learning and AI, health care, data analytics, accounting, medical transcription, web design and Internet service provision. These companies are mostly not high-end, high-intellectual property or research-oriented entities, but they are an increasingly important source of employment, revenue and learning opportunity, particularly for Bhutanese youth.

Start small...

Scan Café was attracted by Bhutan’s high educational standards, competitive wages, cheap electricity and low rent. Most Bhutanese are taught English from an early age and the country scores particularly well on the human assets index that is part of the official LDC category. Rent can be as little as half as in Dhaka or Mumbai. Although the government offers 10-year tax holidays, companies cite low-cost, high-quality labour and economical facilities as bigger advantages.

The immediate future probably is not high-end, research-driven services with strong intellectual property content. Bhutan is following a path well-trodden by successful IT exporters: start small and cheap, discover the appropriate markets through trial and error and move into more sophisticated activities later on. The young people learning basic online and computer skills will develop more advanced expertise and some may even set up their own businesses, perhaps using the incubator facilities provided at the TechPark.

In its quest to become a bigger IT player, Bhutan has the advantage of adaptability. Many larger developing countries are lumbered with a large agricultural sector or powerful lobbies that resist new initiatives. Bhutan’s very small economy has the potential to respond quickly to new global trends.

Government leadership also harnesses the benefits of a small size. As noted in the 2012 DTIS, information technology fits well with the GNH vision. E-commerce and e-government have a low environmental impact because they localize service access and delivery. The DTIS recommended IT as a means of pursuing “green growth” or energy-efficient and climate-friendly economic expansion, which are more efficient than the old, carbon-heavy industries.

It is too early to tell whether the TechPark will herald a transformation of the economy. Annual operating expenditure by all companies totals only in the low millions of dollars and industries like hydropower and ferro-alloys remain far bigger. As the government knows, it is also risky to rely on a handful of businesses. Critical to the success of the park is that more investors follow Scan Café’s lead. Regardless, in a small, remote LDC that only opened up to the outside world less than two decades ago, Thimphu TechPark is a remarkable success story and one which provides lessons for the wider economy.

Source: Adapted from UN CDP research.
Various recent reports and policy make several suggestions as to priority sectors. The “Economic Roadmap 2030 – Private Sector Perspective” prioritizes sectors for FDI, following the government’s six “thrust sectors”: energy, tourism, agriculture, manufacturing, ICT and education. Appropriately, there is a strong focus on ICT with several useful recommendations, such as growth in ICT deployment in public service delivery as well as applications for businesses. The suggestion is made that all public services should be digitized and provided online. The document also recommends that the ICT curriculum for schools and TVETs should be relevant and must be linked to industry requirements and trends. Students should be trained from an early stage of their schooling to take up an ICT-related career.

However, the list of ICT projects suggested for incubation and development is excessively long and includes: “Space technology, AI, Robotics, Big Data, Blockchain, Cryptocurrency, Digital Currency, eBanking, Fintech, GIS, Smart Agriculture, Smart Grid, Smart Transportation, Quantum Computers, etc.” Each of these areas is an enormous industry in its own right and just to attract even a minimal share of each would be a substantial feat. It is highly unlikely that Bhutan will be able to win meaningful foreign investment in many of these types of business, let alone all of them. Size, infrastructure, skills, location and other inherent obstacles stand in the way of progress in these areas and to cast a net this wide would probably be to fall short in any single activity.

A far better approach would be to select a small subset or category of existing FDI, building on the successes of Thimphu TechPark and to target particular foreign investors using an organic growth strategy in existing successful areas like photo editing and photobook design, software development, IT support, data labelling and annotation, health care, data analytics, accounting, medical transcription, web design and Internet service provision. These activities may not be particularly high end, as noted in Box 7.3 above, but they are already proven and can help train young people in export-orientated ICT-enabled services and lead to more substantial, value-adding investments later on. Trying to adopt a top-down approach, which pursues “the next big thing” in pursuit of a “new Silicon Valley” is a strategy that has failed many other bigger countries.

The “Economic Roadmap 2030 – Private Sector Perspective” paper also suggests that Bhutan should focus on cybersecurity and data protection and privacy, suggesting that the government also set up a start-up fund of “at least USD 1 million” to attract innovative foreign starts-ups in areas such as Big Data, machine learning, AI and robotics, and smart agriculture. The fund, it is suggested, could own shares and allocate free shares to the founders and also mandate hiring of Bhutanese employees. However, very few foreign start-ups operating in any of these areas are likely to base their decisions on the existence of a fund of only US$1 million, particularly in an environment with no history in these areas. Typical start-up costs are likely to be many times this sum and companies are more concerned about assets like infrastructure, skills, networking effects and quality of life for employees. As mentioned, it would be a more sensible use of funds to try to build on and extend existing success stories.

7.5 Possible positive implications of LDC graduation

It has been suggested that LDC graduation may have potential benefits for investment, such as the sense of national progress that comes with moving out of the LDC group, which is the international category for the most structurally disadvantaged low-income countries. Broadly, achieving such an important development milestone can be celebrated as a key stage in a country’s history and therefore may conceivably provide an unquantifiable boost to national and international sentiment. Standing in regional and international institutions may even
increase. The government has identified graduation as a gauge of development progress and therefore may benefit from the perception of success.

Some have suggested that foreign investment may even increase as outside perceptions improve. This is also difficult to measure but any impact appears minimal in the case of Bhutan, given that most potential foreign investors do not explicitly use or acknowledge the LDC category.

In some LDCs, it has also been suggested that interest rates on foreign-denominated lending will fall after graduation. However, there is little likelihood that borrowing costs will fall after graduation. Neither multilateral lending institutions nor credit ratings agencies such as Moody’s or Standard and Poor’s take the LDC category into account when determining sovereign bond ratings, although the latter does use some of the subsidiary indicators such as GNI per capita. Bhutan should, however, do its best to leverage any sense of achievement surrounding LDC graduation, particularly given the likely world economic upturn in 2023, hopefully following COVID-19. The time to prepare for LDC graduation is now, several years before the actual event. Any positive sentiment will require active government support. A number of preparatory activities are relevant to FDI but may also have implications elsewhere.

A communications strategy should be drawn up to help address different audiences and stakeholders, reaching out to target groups with desired messages. Communication must be fluid and fashioned to meet certain circumstances as well as the sender’s interests. Communication should not happen haphazardly; it must be organized and built around specific goals—in this case to ensure that LDC graduation is understood by key stakeholders, existing and potential foreign investors; and, where relevant, the wider public, as a success story, with few disadvantages—but that those affected should be made fully aware of the implications. A good communications strategy allows the user to better control messages, improves planning, removes doubt and involves a wide range of people. The accurate communication of facts and analysis on LDC graduation will be essential in order to avoid unnecessary public or private sector reaction. A very simple campaign would consist of a straightforward list of activities conducted in the run-up to, and after, 2023.

If funds permit, a communications manager could even be recruited by the MoEA to lead and coordinate activities. National activities should be linked to those at the international level, discussed below. The communications campaign could first consider the identification of one or more spokespersons who can talk to the press and public about the issues. Target audiences could also be identified, such as Ministers, policymakers, ambassadors, the general public, UN agencies and donors and particularly media outlets.

The following are some possibilities for leveraging LDC graduation and improving potential investor sentiment in the run-up to the event:

- The development of a simple positive slogan or message celebrating graduation and linked to foreign investment and Brand Bhutan. This could be done immediately and used on an ongoing basis.
- A national celebration. Lessons can be learnt here from the example of Bangladesh, which held a country-wide celebration in early 2018 after the country met the criteria for the first time, led by the Prime Minister. The best timing for such an event would be 2023.
- A series of short, simple briefs, with the main facts about graduation, for use and distribution online and in media and publicity activities. This could be done immediately for use throughout the pre-graduation period. The list of Frequently Asked Questions (FAQs) on LDC graduation from the Gradjet.org website could be used.
• A briefing for Members of Parliament and a public forum on LDC graduation in 2022 or 2023.
• Conduct regular press, TV, radio and social media activities. Communications might also be conveyed via social media.

7.6 Investment, export promotion and institutional framework

Current investment policy is conducted by the Department of Industry (DoI) of the Ministry of Economic Affairs. Over 40 focal points exist in various government agencies and coordination is reported to be insufficient, with duplication and a lack of coordination between government departments. Each Ministry conducts its own investment promotion and each has a slightly different mandate, which adds to the complications surrounding the coordination of investment policy. The DoI faces a conflict of interest between promotion and regulation, finding it difficult to perform both functions at once. Ideally these functions would be divided between different entities.

Consultations with government also suggest that budgetary restrictions result in a shortage of expertise on investment promotion, techniques and management. One temporary possibility, suggested during consultations, is to source a full-time international consultant to work with local government officials with the joint terms of reference of enacting a branding strategy, training officials in investment and enhancing the coordination architecture for investment promotion.

A more optimal long-term solution would be to make broader institutional changes aimed at consolidating investment and export promotion, learning from best practice. This may partly be helped by membership in the World Association of Investment Promotion Agencies (WAIPA), but this is not necessary as a prerequisite. In establishing best practice for investment and export promotion, it is worthwhile learning from the case of Singapore, discussed in Chapter 6. A key lesson from Singapore’s development experience concerns the need to win international confidence and to attract FDI as a source of innovation and know-how. In Singapore between 1980 and 2000, FDI averaged around 25 percent of gross fixed capital formation and the country became the leading destination for FDI in East Asia. It is notable that, as shown earlier in this chapter, Bhutan has also had high levels of gross fixed capital formation, even though it has so far been much less successful in attracting foreign investment.

The centralization of a powerful trade and investment promotion and regulation board with some degree of autonomy from government has been central to several countries’ success. The original example is Singapore’s Economic Development Board (EDB), which has formed a key platform of economic development since its establishment in 1961, two years before full independence. Bhutan may wish to consider the creation of an EDB to oversee the generation and implementation of trade, business and investment policy, operating with direct authority over existing Ministries. Other LDCs have followed the same route, Rwanda being a notable and successful example. The underlying principle of an EDB is to exert control over the development process and to overcome the fragmentation and diffusion of trade policy that sometimes emerges through the existence of several overlapping trade-related agencies. Singapore’s EDB is the lead government agency aimed at enhancing the country’s position as a global business centre. Its mission is to generate sustainable economic growth with vibrant business and good job opportunities, aiming to:
• Attract foreign investment via a one-stop agency which facilitates and supports local and foreign investors in both manufacturing and services.

• Help existing industries explore new areas.

• Enhance the business environment by providing feedback to other government agencies to ensure that infrastructure and public services remain efficient and cost competitive.

The multifaceted role of the EDB means that, in effect, it is one of the best examples of trade and investment mainstreaming in practice. Its cross-ministerial authority means that it coordinates trade policy across the different government institutions involved with trade, overcoming the problem of policy fragmentation that often faces trade policy in developing countries and others.

The recommendation to establish an EDB, also made above in Chapter 6, remains relevant since the original DTIS 2012 and could even be combined with a linkages one-stop centre with overarching responsibility for business, trade and investment policy, based on the Singapore model. The board would operate as a statutory body semi-autonomously from government, with the mandate of promoting investment and exports and enhancing Bhutan’s ability to benefit from trade. The Bhutanese Economic Development Board would perform activities such as training in trade and investment for all Ministries and relevant agencies; conducting policy advocacy; image building and investor targeting and aftercare; trade promotion using the latest techniques; as well as reducing bureaucratic barriers to domestic and foreign investment. A dedicated institution, fully staffed, would address these aims as well as possibly helping improve economic statistics.

Technical leadership could come from the existing Departments of Trade and Industry (ideally, the divisions of investment and trade promotion would be replaced, rather than creating a separate institution), as well as from the Ministry of Agriculture; the Tourism Association of Bhutan; the Royal Monetary Authority of Bhutan and the Private Sector Committee. Private sector representatives could attend meetings of the Board.

In the nearer term, to complement the national investment strategy, investment promotion plans for a small number of specific sectors and products should be put in place, using modern techniques of investment promotion and targeting. Priority sectors and products are the information technology arena and specifically areas which have proven success, as highlighted in Section 4 above.

7.7 Investment and special economic zones

Investment promotion should continue to be linked with an industrial park or zone. Measures should be enacted to incentivize investors to transfer knowledge, such as through joint venture schemes or minimum employment requirements. An industrial park or special economic zone (SEZ) can be used to target recommended sectors or subsectors in a specific geographical locale using appropriate incentives and policies.

The document “Bhutan’s Roadmap to 2030: A Private Sector Perspective” makes the sensible suggestion that “identification/declaration of a Special Economic Zone (SEZ) belt (up to 10 km from the border into the country) with a separate regulation along the southern foothills can be explored. This SEZ belt will have a single management and all processes within the SEZ will be fast tracked including issuance of environment clearance. In order to encourage industries to be set up in the SEZ, captive hydropower plants should be allowed to be set
up to cater to industries within the SEZ.” Although zoning has been part of official policy for many years, since well before the DTIS 2012, progress has been slow, other than at Pasakha, Phuentsholing and Thimphu TechPark. Lessons from other successful countries show that rapid progress is important, to show foreign and domestic investors that change is possible and to avoid the entrenchment of existing problems or inefficient management.

The main reason for using SEZs, particularly in LDCs, is that addressing infrastructure, regulatory regimes or trade logistics is easier in a single physical location than in the whole country. Often, nationwide “horizontal” policy initiatives fail—such as improvements to the entire business environment—because they try to achieve too much in too large an area. SEZs, which are specific and dedicated to a small number of sectors, can be relatively easier to run properly and offer a useful opportunity to learn about what works and what doesn’t.

The term SEZ encompasses industrial parks, export processing zones, science and innovation parks, free ports and others. SEZs: (i) are in a geographically specific area, usually physically secured; (ii) have a single management or administration; (iii) offer benefits for companies in the zone; and (iv) have a separate, duty-free customs area and streamlined procedures.106

SEZs have had enormous success in some contexts, most notably China, where the original four coastal SEZs were later expanded across the country and formed the basis of the country’s industrial transformation. Yet in some regions, particularly sub-Saharan Africa, they have fallen short of their objectives or failed outright. It is extremely important to adapt zones to context. Although SEZs must be adapted to local circumstances, World Bank research suggests that five broad features stand out:107

- A robust legal and regulation framework and strong institutions, including effective one-stop-shop services. It is important to avoid “one-more-stop shops” which only add to the administrative burden. Some Ministries may have to be convinced to surrender power to the zone authority, which requires political leadership from above.

- Strong government support as part of the national development strategy. SEZs will not work unless government is committed to their success.

- A prototype design for broader national reforms. Some countries which benefited from SEZs, particularly China, used them as a way of experimenting with policies on a small scale before broadening lessons to the wider economy.

- A strategic location with sound infrastructure. SEZs positioning is crucial and SEZs must be near transport infrastructure—in Bhutan’s case, near the Indian border, including Phuentsoling and near the airport.

- Strong commercial viability and significant economic and social returns. Many SEZs failed because they were ill thought-out and propped up by inappropriate incentives. SEZs activity must be oriented towards commercial success in the medium term, if not immediately.

While SEZs have often succeeded, many do not provide corresponding social and urban services such as health and education or public transport to accommodate their increasing population. Some SEZs are at a distance from their host cities, operating as isolated enclaves with few cultural and leisure activities. Such SEZs struggle to attract high-quality talent and investment and face challenges in sustaining growth or upgrading their industrial structures. To mitigate these problems, the new generation of SEZs in China is now encouraged to integrate with urban planning and development, with good public services and urban amenities.108

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108 ibid., p.10
to the wider economy. The long-term entrenchment of labour and environmental exploitation is contrary to development and sustainable structural transformation.

World Bank research shows that many SEZs in Africa have failed, with perhaps the best performing are those in Egypt, Kenya, Madagascar, Mauritius and possibly Ghana. Key lessons from the African experience include:

- SEZs must be built and launched with a proper legal, regulatory and institutional framework.
- The cost of doing business must be low enough to attract investors.
- The zone must be built into national development strategy or based on strong demand from business.
- Infrastructure must be good enough. Power, gas, roads, ports and telecom are the key constraints. Strong commitment from government and active participation of the private sector are crucial.
- Zone management and operational know-how are critical. Zone developers, including the relevant government agencies, may not have experience in zone management and operations and may be unable to identify suitable partners for zone management and operations. Often this management expertise may be brought in from abroad. Managers must be given the power and authority to run the zone efficiently.
- Government ownership and policy consistency must be strong. Long-term government commitment is crucial for success.
- Governments must live up to commitments to provide promised compensation for land acquisition and resettlement, so as to allow zones to develop over the long term.

Two priorities to complement the development of such a zone and to be carried out by the investment division of the Ministry of Economic Affairs, are investor targeting (Box 7.4) and aftercare. Aftercare, or corporate development support, involves looking after investors when they are in the country as part of a long-term strategic relationship involving carefully cultivated, often personal, relationships. Both of these activities are conducive to trade development, since foreign investors and diaspora often bring with them new techniques, contacts and access to international supply chains. It is unlikely that the products chosen for investor targeting will be exported by Bhutanese companies without foreign or diaspora investment.

**Box 7.4: Investor targeting**

Investor targeting, in part a process of screening, starts with a wide range of possible investors, sectors and projects and through a coherent logical series of steps screens out those which are less appropriate. A manageable number of prospective investors remain that can then be approached with a view to introducing and negotiating investment.

Most of the initial steps in investor targeting are simply finer and finer information screens, a process of matching potential investors, sectors and projects to specific informational criteria to find the best matches. Those best matches then move on to a finer screen, involving the investors with the highest possible likelihood of investing.

Five main principles distinguish targeting from more general investment promotion:

1. Active identification of specific investment projects
2. Careful planning and management of investor search programmes
3. Investigation of specific corporate priorities
4. Confidential promotion to specific corporate executives
5. Delivery through a single agency leadership, management and coordination

Some other countries explicitly target specific sectors or even Transnational Corporations (TNCs). The state government of Penang in Malaysia played a very proactive role by knocking on doors and extending special invitations to foreign investors that seemed to fit especially well in the development of the local enterprise cluster, with a special emphasis on the first set of TNC pioneers which quickly made the location known worldwide.
Experience shows that the strategic attraction of specific types of FDI is far from easy. South Africa made efforts to target FDI in specific sectors and to encourage domestic economic activities around these strategic firms. With the exception of a Motor Industry Development Programme, however, the results were modest. In some cases, it has not been possible to attract the envisaged foreign investments, while in others no substantial forward and backward linkages have been built.

Some countries develop an integrated strategy using investment promotion agencies that combine marketing and company targeting with aftercare and product development. Trade and Investment South Africa (TISA) seeks to establish linkages with larger foreign-based firms in order to find export markets for SMEs. TISA staff have a mandate to encourage TNCs that they deal with to source locally and work with the main national SME development agency to facilitate such opportunities.

Investor targeting involves:

1. **Active identification of specific investment projects**
   The rationale for a proactive approach is that:
   - Investment projects can be pursued that match the country’s needs and capabilities
   - Targeting raises the understanding of business processes in investment promotion agencies (IPAs) and government
   - The development of target sectors can benefit local companies and institutions
   - It builds a business-based partnership with potential and present TNCs.

2. **Carefully planned and managed investor search programmes**
   A distinctive feature is the process of identifying the sectors, companies, projects and benefits associated with a positive national partnership with international investors. It helps to plan to target through the eyes and perceptions of international investors.

3. **Investigation of specific corporate priorities**
   Targeting also involves devising and developing a project in relation to the known business priorities and processes of a specific company. It is not simply meeting with a company to suggest investing in, for example, Cape Verde, but rather a thoughtful contribution to the company’s business priorities for the region.

4. **Confidential promotion to specific corporate executives**
   A fourth feature is to identify the specific corporate executive or group of executives with the remit and authority to accept projects for evaluation and to authorize investment. This does not involve a general promotion to corporate public relations executives, regional sales staff or engineers. Targeting programmes are usually confidential, invisible and only known about when successful projects are commissioned.

### 7.8 Investment treaties and agencies

Bilateral and regional investment agreements feature core provisions including national treatment, fair and equitable treatment, dispute settlement mechanisms and arbitration procedures and transparency. The main argument in favour of such agreements is that they aim to reassure foreign investors that their investments will not be reappropriated and that they will be dealt with fairly, according to accepted rules on dispute and arbitration. In turn, this is intended to attract more inward FDI.

However, many countries are selective as to which treaties and mechanisms they join, as they may be unwilling to sacrifice policy space, foregoing the ability to shape policy in desired directions. Many foreign investors are incentivized not only by the legal framework, but by bigger concerns such as the size of the domestic market, access to other markets, human resources and political stability. It may be argued that Bhutan should sign bilateral investment treaties with major existing Asian potential export destinations to encourage trade and investment flows. However, the existence of bilateral treaties is not likely to be the main obstacle to trade; first must come supply-side capability, demand and associated trade facilitation measures.
Bhutan has not signed any major bilateral investment treaties (BITs), although it is a member of two treaties with investment provisions, according to the UNCTAD Investment Policy Hub.\textsuperscript{109} These are the BIMSTEC Framework Agreement and SAFTA. Bhutan is a member of seven multilateral investment related instruments: the New York Convention, the UN Code of Conduct on Transnational Corporations, the World Bank Investment Guidelines, the UN Guiding Principles on Business and Human Rights, the Permanent Sovereignty UN Resolution, the New International Economic Order UN Resolution and the Charter of Economic Rights and Duties of States.\textsuperscript{110}

Bhutan joined the United Nations Convention on the Recognition and Enforcement of Foreign Arbitral Awards (the New York Convention) and the United Nations Commission on International Trade Law (UNCITRAL) in 2014. In 2013, the country passed a national arbitration law.\textsuperscript{111}

Like its main trade and investment partner, India, Bhutan is not a member of the International Convention for the Settlement of Investment Disputes (ICSID), the main institution devoted to international investment dispute settlement. Although Bhutan could join without charge, it is worth considering the case for and against very carefully. ICSID has administered the majority of international investment cases. States have agreed on ICSID as a forum for dispute settlement between investors and states in most international investment treaties and in numerous investment laws and contracts. ICSID is one of the five organizations of the World Bank Group, along with the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). While it is unlikely that membership would lead to a sudden increase in incoming FDI, the advantage would be that potential and existing investors would feel more reassurance about the risks associated with investments, including nationalization or treatment which they perceived as unfair.

Investor-state dispute resolution, however, should be avoided if at all possible in bilateral investment treaties given the ability of corporations to effectively sue governments in the event of rulings which run against their interests. For example, some international law firms have recently issued advice to clients stating that they may be entitled to compensation for actions relating to COVID-19. In effect, investor-state dispute resolution can bypass the democratic process and accord foreign corporations rights, a form of restriction on policy space and democratic legitimation which may run contrary to the objectives of the Bhutanese government. India has not joined ICSID because it believes that the Convention’s rules for arbitration were orientated towards the developed countries and failed to provide scope for a review of any award by an Indian court even if it violated India’s public policy.\textsuperscript{112} India has also unilaterally terminated 58 bilateral investment treaties because of concerns about undue bias towards foreign investors. Whether this concern will be allayed by a new model investment treaty is yet to be seen and it is not impossible that India’s stance towards investment treaties will be reversed. In reality, Bhutan’s stance on bilateral treaties and ICSID is likely to follow India’s.

\textsuperscript{109} Treaties with investment provisions (TIPs) include various types of investment treaties that are not BITs. Three main types of TIPs are: 1. broad economic treaties that include obligations commonly found in BITs (e.g. a free trade agreement with an investment chapter); 2. treaties with limited investment-related provisions (e.g. only those concerning establishment of investments or free transfer of investment-related funds); and 3. treaties that only contain “framework” clauses such as the ones on cooperation in the area of investment and/or for a mandate for future negotiations on investment issues. See UNCTAD (n.d.). Investment Policy Hub – Bhutan. Available at https://investmentpolicy.unctad.org/international-investment-agreements/countries/23/bhutan.

\textsuperscript{110} Investment-related instruments (IRIs) include various binding and not-binding instruments such as model agreements and draft instruments, multilateral conventions on dispute settlement and arbitration rules, documents adopted by international organizations, and others.


Bhutan should consider joining the World Association of Investment Promotion Agencies (WAIPA). As a “Tier II” country with a GDP per capita of between US$2,501 and US$12,500, the annual membership fee for Bhutan would be US$5,000. WAIPA membership would give Bhutan access to a platform to discuss the latest developments in investment and exchange best practices in investment promotion, allowing the country to learn from international best practice. Membership also includes discounts, sponsorship or special rates for international events, conferences and training courses; the right to vote at the annual WAIPA General Assembly; and the right to become a member of the Steering Committee.

It is important for countries such as Bhutan, however, not to aspire towards any standard template which might be considered “best practice” in investment promotion for all countries. The needs and abilities of a low-population LDC with a very small domestic market and specific human and natural assets are very different to that of large developed or developing countries with more sophisticated domestic markets, large existing FDI stock and corresponding institutional structures, including developed legal systems. Given that Bhutan does not have an investment promotion agency and in acknowledgement of budgetary and fiscal constraints, it will be important to learn lessons on how to develop investment promotion from appropriate comparator experiences. To that end, Bhutan can learn most from other LDCs and from middle-income countries, including landlocked countries, which may have recently passed through a similar experience.

With this in mind, Bhutan is currently benefiting from a two-year joint project run between the EIF and WAIPA to build the capacity of graduating Asia-Pacific LDCs to promote investment.113 The project aims to improve the capacities and skills of IPAs, EIF National Implementation Units (NIUs) and government officials in LDCs to promote and facilitate investment, and to improve the regional and international coordination of IPAs in LDCs, as well as advocacy. The goal is to improve the business climate and investment conditions, to attract sustainable investments, and to leverage additional resources in order to meet the SDGs. This project should be leveraged as much as possible in an effort to learn experiences from relevant cases of successful investment promotion in other graduating Asia-Pacific LDCs.

Box 7.5: Support for the 21st Century Economic Roadmap

Investment promotion and Brand Bhutan will remain central to the 21st Century Economic Roadmap, featuring in all key documentation and strategies for the coming 10 years. The centrality of Brand Bhutan to the Roadmap can be witnessed in the cross-ministerial commitment to the project, which has been designed to encompass and reflect Bhutanese values, including GNH. The 12th Five Year Plan 2018–2023, the conclusion of which has been designed to coincide with LDC graduation, makes foreign investment and Brand Bhutan central. Bhutan 2020: A Vision for Peace, Prosperity and Happiness similarly places these themes centrally, as does the Economic Development Policy 2016. Bhutan’s ability to attract foreign investment which supports the national vision, while simultaneously maintaining the national vision, will prove critical to its progress over the decade.

113 World Association of Investment Promotion Agencies (WAIPA 2020.) WAIPA launches EIF co-funded project to build capacity on investment promotion in LDCs, 28 January. Available at https://waipa.org/announcements/waipa-launches-eif-co-funded-project-to-build-capacity-on-investment-promotion-in-ledcs/.
<table>
<thead>
<tr>
<th>Company name</th>
<th>Lease start date</th>
<th>FDI from country</th>
<th>Business focus</th>
<th>Status as of August 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scan Café Pvt. Ltd.</td>
<td>June 2013 Pilot started in Nov 2012</td>
<td>USA</td>
<td>Photo editing and photobook design</td>
<td>Anchor tenant. Still at IT Park. Employs about 250 people</td>
</tr>
<tr>
<td>Secure Link Services Pvt. Ltd. (SELISE)</td>
<td>December 2015</td>
<td>Switzerland</td>
<td>Software development</td>
<td>Still at IT Park. Employs about 40 people</td>
</tr>
<tr>
<td>Southtech Bhutan Pvt. Ltd.</td>
<td>December 2015</td>
<td>Bangladesh</td>
<td>Software development</td>
<td>Still at IT Park. Employs about 25 people</td>
</tr>
<tr>
<td>MultiRational Pvt. Ltd.</td>
<td>February 2016</td>
<td>Australia</td>
<td>IT support/software and other shared services</td>
<td>Still at IT Park. Employs about 25 people</td>
</tr>
<tr>
<td>iMerit Bhutan Pvt. Ltd</td>
<td>June 2019</td>
<td>USA</td>
<td>Data labelling and annotation to train machine learning and AI</td>
<td>Still at IT Park. Employs about 125 people</td>
</tr>
<tr>
<td>314e Bhutan Pvt. Ltd</td>
<td>September 2019</td>
<td>USA</td>
<td>Health care IT firm</td>
<td>Still at IT Park. Employs about 25 people</td>
</tr>
<tr>
<td>ZOOP KG Pvt. Ltd.</td>
<td>September 2016</td>
<td>Canada</td>
<td>Shared services</td>
<td>Still at IT Park. Employs about 5 people</td>
</tr>
<tr>
<td>Bid Ocean Pvt. Ltd.</td>
<td>February 2017</td>
<td>Canada</td>
<td>Tender curation services</td>
<td>Moved out of IT Park to a building nearby. Employs about 30 people.</td>
</tr>
<tr>
<td>TIJ Bhutan Pvt. Ltd</td>
<td>August 2019</td>
<td>Japan</td>
<td>Software development</td>
<td>Still at IT Park. Employs about 15 people</td>
</tr>
<tr>
<td>TRX Pvt. Ltd.</td>
<td>February 2017</td>
<td>India</td>
<td>IP trading platform</td>
<td>Operations suspended due to various business issues.</td>
</tr>
<tr>
<td>Advantage outsourced solutions Pvt. Ltd</td>
<td>January 2018</td>
<td>JV- Bhutanese and foreign investors</td>
<td>Accounting services</td>
<td>Still at IT Park Business partnership issue arose. Employs about 5 people.</td>
</tr>
<tr>
<td>Company</td>
<td>Date</td>
<td>Country</td>
<td>Description</td>
<td>Status</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------</td>
<td>---------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Gai Technologies (Bhutan) Pvt. Ltd</td>
<td>September 2018</td>
<td>India</td>
<td>Website design and development</td>
<td>Operations on hold due to COVID-19.</td>
</tr>
<tr>
<td>Bhutan NetCom Pvt. Ltd</td>
<td>September 2019</td>
<td>Bhutanese-owned company</td>
<td>Multiple-system operator (MSO) for cable TV services</td>
<td>Still at IT Park. Employs about 5 people.</td>
</tr>
<tr>
<td>Data Centre Services Pvt. Ltd</td>
<td>November 2014</td>
<td>Bhutanese-owned company, subsidiary of New Edge Technologies</td>
<td>Data centre operation and management</td>
<td>Still at IT Park. Operates the govt. data centre. Employs about 5 people.</td>
</tr>
<tr>
<td>NANO</td>
<td>2017</td>
<td>Bhutanese-owned company</td>
<td>Internet Service Provider</td>
<td>Main equipment housed at the IT Park. Employs around 10 people.</td>
</tr>
<tr>
<td>Thimphu TechPark Ltd</td>
<td>2010 – starting with construction of the IT Park</td>
<td>DHI company, TechPark management and IT services</td>
<td></td>
<td>Employs about 70 people</td>
</tr>
</tbody>
</table>

References


8.1 Introduction

Bhutan’s tourism sector is a major contributor to its socio-economic development: creating employment across various sectors, generating much-needed foreign currency and forging linkages with other industries.

Long identified as one of the five key growth sectors for Bhutan, tourism and its related services are important drivers for the economic sector. Maximizing this growth potential could further contribute to jobs and income growth, especially among the rural poor and low-skilled workers.

However, Bhutan’s tourism sector is not immune to structural and operational challenges, ranging from matters of geography, infrastructure and human resource skills, to policy, marketing and coordination issues. The COVID-19 pandemic has further dealt a huge blow to the sector, making a successful rebound strategy and mechanism difficult.

This chapter will take stock of Bhutan’s tourism development since 2012, analyse challenges and constraints and make recommendations that focus on enhancing yield and quality through a focus on tourism-support products and services, in line with overarching national goals and policies.

8.2 Development of the tourism sector since 2012

Box 8.1: Summary of main achievements and setbacks since DTIS 2012

The tourism sector in Bhutan has seen rapid changes in the past eight years. A high growth rate of regional tourists, coupled with long-existing bottlenecks, has prompted efforts to restructure the sector in a responsible and sustainable manner.

**Achievements**

- New tourism legislation: Various legislation, rules and guidelines have been introduced in the past decade to help regulate the tourism system. In particular, the Tourism Levy Act of Bhutan 2020 levies a Sustainable Development Fee to previously exempt and unregulated regional leisure tourists.

- Steady growth: Visitor arrivals and earnings have grown consistently since 2012. Bhutan has seen a jump from 105,407 arrivals in 2012 to 315,599 arrivals in 2019. Earnings from international arrivals have also increased from US$62.8 million in 2012 to US$88.63 million in 2019. Direct employment in the tourism sector increased from 20,372 in 2013 to 29,827 in 2017, with estimates at almost 50,000 in 2020 when considering linkages.

- Infrastructure and products: Several “friendship” package offers with international source markets helped boost arrivals between 2013 and 2018. During the same period, 10 new trekking routes were developed and dozens of road amenities were constructed. New popular festivals were also introduced, helping increase diversification in cultural tours.

- Operations: Visa and Entry and Route Permit applications can now be facilitated through an online platform, Tashel, which has eased turnaround time. The Tourism Council of Bhutan (TCB) has also developed tourism satellite accounting to better capture the sector’s contribution to the economy.
Obstacles

- **Product diversification**: Bhutan’s main attraction has been in the leisure and cultural segments, with little innovation in new products and services. Attempts at promoting eco-tourism and nature-based tourism have not been successful, while attractive segments such as “health and wellness” and “meetings, incentives, conferences and events (MICE)” tourism have not been prioritized and marketed effectively.

- **Operational inefficiency**: Weak inter-agency coordination, lack of strong stakeholder consultations, payment gateway bottlenecks, logistical and infrastructure barriers and soft enforcement of the pricing mechanism have led to major operational inefficiencies within the service delivery of the system.

- **Unregulated growth of regional tourists**: The share of regional tourists to overall arrivals has grown from 48.12 percent in 2012 to 77.12 percent in 2020. Unregulated and exempt from the Sustainable Development Fee until 2020, regional tourist numbers have threatened an onset of mass tourism potentially eroding both consumer perception of Bhutanese tourism and internal infrastructure. Many private businesses are already focusing on catering to this trend.

Bhutan’s tourism industry contributes over 9 percent to GDP, earns the highest hard currency reserves and provides the highest employment opportunity. Since the inception of the sector in 1974, Bhutan has followed a policy of “High Value, Low Volume,” in line with the principles of Gross National Happiness (GNH) and focuses on a highly regulated system to ensure sustainability and the prevention of mass tourism.

### 8.2.1 Income

Earnings from tourism have consistently increased over the years. In 2019, Bhutan earned US$88.63 million through the tourism tariff, as compared to US$47.68 million in 2011. Figure 8.1 illustrates the growth in tariff earnings from international tourists since 2011.

These earnings, however, reflect only international tourists paying the Minimum Daily Package Rate (MDPR\(^{114}\)) and not regional tourists (from India, Bangladesh and Maldives) who are currently exempt from the MDPR tariff. There are no statistics on direct earnings from regional tourists, although a new Sustainable Development Fee (SDF) for regional tourists (included in the MDPR for international tourists) has been implemented since the beginning of 2020.\(^{115}\)

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\(^{114}\) MDPR refers to the minimum rate paid by all leisure tourists for an all-inclusive package tour to Bhutan. This includes the Sustainable Development Fee (SDF) component and payment for the all-inclusive service packages (accommodation, meals, guides and ground transport within Bhutan). The current MDPR is US$250 per person per night during the high season, the months of March, April, May, September, October and November and US$200 per person per night during the low season, the months of December, January, February, June, July, and August. For both periods, the SDF is fixed at US$65 per person per night.

8.2.2 Tourist arrivals

In 2019, there was a total of 315,599 inbound visitors to Bhutan, an increase of 15.14 percent from the previous year and up from 100,833 visitors in 2011. Figure 8.2 illustrates the total visitor arrivals from 2011 to 2019.

There is an important distinction in the breakdown between international and regional arrivals. Regional tourists comprise the majority of visitors, accounting for 77.12 percent of all tourists in 2019 and have also been growing at a faster rate, 20.32 percent in 2019 compared to international growth of only 0.55 percent.

Figure 8.2: Total arrivals to Bhutan, 2011 to 2019


8.2.3 Seasonality

Seasonality in Bhutan is based on a self-imposed division between high and low seasons, with corresponding tariff prices. High season is during the months of March, April, May, September, October and November and low season is during December, January, February, June, July and August.

These seasonal peaks reflect the high dependency on cultural tourism, weather conditions and popular festival dates. Figure 8.3 shows that the vast majority of tourists visited during the high season in 2019.

Figure 8.3: Total arrivals to Bhutan, 2011 to 2019

8.2.4   Products and geographical spread

According to the Tourism Council of Bhutan (TCB)’s 2019 survey, practically all arrivals to Bhutan have undertaken some form of cultural sightseeing activity. Historically, around 90 percent of tariff-paying tourists are primarily cultural tourists and around 10 percent are trekking tourists. Birdwatching and wellness tourists account for less than 1 percent each. Product development has been largely concentrated on culture, nature and trek-related activities, with recent attention towards diversification to wellness and adventure tourism.

Regional distribution of visits is also very limited with a high concentration mainly in the western and central parts of the country. As Figure 8.4 illustrates, the districts of Paro, Thimphu, Punakha, Wangdue Phodrang and Bumthang have recorded the highest visitors and visitor nights.

This trend can be attributed to a host of interconnected factors, including the only international airport being located in Paro, the tourism infrastructure and accommodation investments in these regions, the location of major festivals, the quality of road connectivity and the average length of stay of seven days which limits longer circuit tours.

Figure 8.4: Visitor arrivals and visitor nights, by district, 2019

Note: These figures only account for MDPR visitors, since the TCB does not have statistics for regional tourists.

8.2.5   Tourism linkages with other services

Tourism does not have industry status in Bhutan and instead falls under the Service Industry. As a sector, however, it is made up of a diverse group of industries that supply goods and services, representing a complex value chain from direct vendors to intermediate suppliers. These interlinkages, both forward and backward, are present in various forms, from physical entities such as accommodation, restaurants and attractions to service providers such as tour operators, car rentals, guides, farmers and food processors, manufacturers, crafts persons, airlines, IT providers and distributors.

The TCB estimates that while US$88.63 million was generated though the Minimum Daily Package Rate, the total expenditure made by all arrivals in 2019 was US$345.88 million, reflecting an average trip expenditure of US$1,354 per visitor, as shown in Table 8.1.

The direct revenue for the government in the form of the Sustainable Development Fee was US$23.42 million, which means US$322.46 million was generated by tourism and its related industries. While the contribution of the tourism sector to GDP is not captured in the national accounts statistics, tourism is estimated to make up 9 percent of Bhutan’s GDP and employ around 6 percent of the population.

Table 8.1: Average trip expenditure and total expenditure by main purpose, 2019

<table>
<thead>
<tr>
<th>Main purpose</th>
<th>Average trip expenditure (USD)</th>
<th>Total trip expenditure (USD million)</th>
<th>Average expenditure per night (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holiday, leisure and recreation</td>
<td>1,323</td>
<td>317.65</td>
<td>231.90</td>
</tr>
<tr>
<td>Visiting friends and relatives</td>
<td>1,434</td>
<td>2.51</td>
<td>185.40</td>
</tr>
<tr>
<td>Religion/Pilgrimage</td>
<td>2,636</td>
<td>8.78</td>
<td>392.53</td>
</tr>
<tr>
<td>Incentives travel</td>
<td>2,936</td>
<td>0.74</td>
<td>618.54</td>
</tr>
<tr>
<td>Business/Professional</td>
<td>1,619</td>
<td>16.02</td>
<td>257.33</td>
</tr>
<tr>
<td>Others</td>
<td>1,433</td>
<td>0.18</td>
<td>286.61</td>
</tr>
<tr>
<td>Total</td>
<td>1,354</td>
<td>345.88</td>
<td>235.07</td>
</tr>
</tbody>
</table>

Source: Tourism Annual Report 2019

8.2.6 11th Five Year Plan and achievements

The 11th Five Year Plan (FYP), from 2013 to 2018, identified tourism as a key sector and initiated several measures to accelerate economic growth and achieve self-reliance. Under the Rapid Investment in Selected Enterprises (RISE) Flagship Programme, the 11th FYP specifically focused on achieving higher yields per tourist, doubling arrivals, improving the regional spread and spreading arrivals throughout the calendar year. The 11th FYP emphasized strengthening tourism governance, developing new products, facilitating the development of tourist infrastructure and aggressive destination promotion and marketing. As a result, numerous targets were achieved, including the development of 10 trek routes and 21 road amenities, the introduction of 7 new festivals and various special “friendship” package offers.

8.3 RGoB tourism policy

8.3.1 12th Five Year Plan and Tourism Flagship Programme

The 12th Five Year Plan, from 2018 to 2023, outlines National Key Result Areas (NKRA) for tourism, accelerating development of the sector through diversification of products, services and amenities and intensifying marketing to promote Bhutan as a year-round destination for high-end tourism. It also specifically targets 15,000 new jobs in tourism, which comprises 24.27 percent of the total 61,811 projected jobs.

From a total capital outlay of Nu. 116 billion, BTN 15 billion has been allocated for Flagship Programmes, within which the Sustainable Tourism Development Flagship Programme has been given an indicative outlay of BTN 1.566 billion. Implementation is led by the TCB in collaboration with local governments, the Ministry of Economic Affairs and the private sector. The Sustainable Tourism Development Flagship Programme focuses on increased rural livelihood income, balanced regional development, seasonal spread of tourist arrivals, upskilling and training of tourism professionals and further positioning Bhutan as an exclusive destination.

8.3.2 Tourism Policy

Bhutan’s Tourism Policy is guided by the “High Value and Low Volume” policy founded on the principle of sustainability and in line with the national objectives of Gross National Happiness that tourism must be environmentally friendly, socially and culturally acceptable and economically viable.

The regulatory frameworks relating to tourism are the Tourism Levy Act of Bhutan 2020, Tourism Rules and Regulations 2017 and the Economic Development Policy 2016. The Tourism Policy is currently under development.

These policies enforced a Minimum Daily Package Rate. It meant a minimum of US$200 or US$250 daily package rate (depending on seasonality), which includes standard accommodation (minimum 3 star), meals, transportation and guide services. It also includes a US$65 daily royalty called the Sustainable Development Fee. This mechanism has discouraged low-budget tourists and backpackers who normally flock to the region.

However, the above policies did not address the rapidly increasing number of unregulated and non-tariff paying regional tourists. This led to a huge increase of regional tourists that now comprises almost 80 percent of all inbound tourists. Figure 8.5 illustrates the growth of regional tourists since 2011.

The Tourism Levy Act of Bhutan 2020, which was adopted in February and implemented in July 2020, provides a major shift in tourism policy by incorporating regional tourists in the tourism levy. While international tourists are charged the existing US$65 per night halt, regional tourists are charged BTN 1,200 per night halt. The effect of this policy change will be difficult to assess for some time due to the pandemic, which has totally stopped the tourism sector from functioning.

Box 8.2: Observed and expected impacts emerging from the COVID-19 crisis

The COVID-19 pandemic has brought Bhutan and the world to a standstill, with tourism being the worst affected of all major economic sectors. To deal with this unprecedented crisis, various policy measures have been adopted by the Royal Government of Bhutan.

Impact and response

- Bhutan saw its first COVID-19 case on 5 March 2020. A strong response through strict health and confinement measures has so far prevented any local community transmission. Travel restrictions were put into place and since 24 March 2020, there have been no tourists in the country, which directly affected around 50,000 people working in tourism and its related sectors. The sudden halt in tourism has led to large furloughing in these businesses. Without any sources of revenues over what has now been a prolonged period, hundreds of hotels face the prospect of defaulting on loans.
His Majesty and the Royal Government have announced a wide range of economic measures. The Druk Gyalpo’s Relief Kidu provided direct cash compensation totalling BTN 184 million for 31,476 applicants within two months. The government announced cross-cutting fiscal and monetary measures, including the creation of special credit lines at reduced rates, interest waivers and loan deferment across all sectors and the postponement of filing and payment of taxes.

A Tourism Stimulus Plan, with a budget of BTN 286 million, is being carried out. The financial arrangement is adjusted from the BTN 1.5 billion originally allocated for the Tourism Flagship Programme in the 12th Five Year Plan. The Plan has identified four project areas: infrastructure and product development, training and reskilling, waste management, and studies and services.

Outlook

- Grave concerns surround the timeline for recovery and restart of tourism. Optimistic predictions estimate a slow reopening in 2021. Forecasts by tourism stakeholders indicate that it could take Bhutan as long as three to four years to return to pre-pandemic figures and trends. Bhutan is also likely to be negatively affected by the extended economic downturn in the region, on which a large number of tourist arrivals depends.
- The silver lining during this crisis is that it presents a real opportunity for a serious reconsideration and transformation of the sector. Post-COVID-19 strategies are being formulated by various high-level committees and it has forced them to assess the long-term viability for the sector. For decades, debate between stakeholders on the value of the current tariff model has been rife. However, the pursuit of a “High Value, Low Volume” tourism goal should not be reliant only on a tariff-based pricing mechanism.
- While it is important to study the impact of a liberalization of the tariff structure, it is also critical to improve the quality of the product itself. A tariff premium is worth it if, and only if, the quality of services and infrastructure, the ease of booking and travel, the emphasis on sustainable and responsible tours and the brand reputation are also worth it.

Besides the levy of a tariff, specific guidelines and standard operating procedures (SOPs) for regional tourists have been developed but not yet implemented. These guidelines will define important modalities, such as requirements for use of Bhutanese tour operators, local licensed guides and vehicles.

Figure 8.5: Regional tourist arrivals and percentage share from total arrivals, 2011–2019

<table>
<thead>
<tr>
<th>Year</th>
<th>Regional Arrivals</th>
<th>Total Arrivals</th>
<th>% share of Total Arrivals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>53,223</td>
<td>89,988</td>
<td>59.15</td>
</tr>
<tr>
<td>2013</td>
<td>63,426</td>
<td>116,209</td>
<td>54.58</td>
</tr>
<tr>
<td>2014</td>
<td>65,399</td>
<td>133,480</td>
<td>49</td>
</tr>
<tr>
<td>2015</td>
<td>97,584</td>
<td>146,797</td>
<td>62.91</td>
</tr>
<tr>
<td>2016</td>
<td>146,797</td>
<td>183,287</td>
<td>70.05</td>
</tr>
<tr>
<td>2017</td>
<td>155,121</td>
<td>209,570</td>
<td>71.96</td>
</tr>
<tr>
<td>2018</td>
<td>202,290</td>
<td>254,704</td>
<td>73.8</td>
</tr>
<tr>
<td>2019</td>
<td>243,400</td>
<td>315,599</td>
<td>77.12</td>
</tr>
</tbody>
</table>

8.3.3 The 21st Century Economic Roadmap

The 21st Century Economic Roadmap aims to chart out Bhutan’s economic future with the specific goal of becoming a high-income society by 2030 with high Gross National Happiness. A National Task Force led by a High-Level Round Table chaired by the Prime Minister spearheads the actual development of the roadmap. The National Task Force is currently in the process of consultations with stakeholders on various strategies and plans. The roadmap development exercise was expected to be completed by December 2020 and officially launched in February 2021.

Box 8.2: Support of the sector to achieve the indicators of the 21st Century Economy Roadmap

The 21st Century Economic Roadmap aims to transform Bhutan into a “high-income GNH Society by 2030” and will guide implementation plans, programmes and policies for future governments. The tourism sector has been identified as a “Key Driver” that will lead Bhutan’s growth and development in the next decade and beyond.

In order to realize the vision of the roadmap, it is imperative that the tourism sector in Bhutan adjusts to the modern demands of the global source market: changing trends in consumer behaviour and demographics, new marketing techniques and platforms, shifts in product offerings post-COVID-19 and ease of payments and scheduling.

For Bhutan to capture the full benefits of the growing global tourism industry and still maintain its focus on sustainable and responsible tourism, it must be able to resolve the inefficiencies and constraints of the current system and revisit the larger structural setup, the tariff model, to adjust it to the context of growing competition and the need for product relevance.

8.4 Challenges and constraints

8.4.1 Poor regional spread

As discussed earlier in Section 8.2.4, most tourism activities are concentrated in western Bhutan. The western districts of Thimphu, Paro, Punakha, Wangdue Phodrang and Haa account for over 85 percent of all bed nights. Data from the Royal Monetary Authority (RMA) indicate that Nu. 12.8 billion (87 percent) of the total Nu. 14.8 billion in loans sanctioned by financial institutions for hotel construction were for hotels in Thimphu, Paro and Punakha. Despite repeated pledges by successive governments to increase visits to the east, the benefits of tourism continue to be uneven in terms of regional spread. Numerous factors account for the low number of visits to eastern Bhutan:

1. Lack of tourist infrastructure facilities and amenities: The low volume of tourist arrivals in many eastern and southern districts constrains private sector investment, especially for accommodation infrastructure. Without these amenities and facilities, the majority of tourists, who are primarily leisure and culture-based, prefer the comfortable western tourist circuit, further hindering attractiveness for private investment.

2. Limited tourism product diversification: Over the past decade, there have been numerous initiatives to improve tourism facilities, diversify tourism products and attract investments in non-western regions. Ecotourism, agritourism and nature-based tourism have been promoted as solutions to increase the regional spread. However, the profile of tourists continues to be dominated by culture and leisure interests and tourism products and services remain concentrated in the western region.

3. Long travel distance and time: The average length of stay for tourists in Bhutan is seven days. This limits longer circuit tours to the other regions of Bhutan, especially if the tourism activities are considered similar. In addition, the daily tariff, poor quality of roads and ensuing seasonal roadblocks, lack of roadside amenities and long driving times dissuade travel beyond the western circuit. Although domestic air services have been introduced, they are often unreliable due to weather conditions.

8.4.2 Infrastructure

Contrary to popular belief, there is no quota or limit to the number of tourists allowed to visit Bhutan. The carrying capacity is regulated by tourism infrastructure. The seasonal nature of tourism has led to the inequitable distribution of visitors and inequitable contribution of tourism to regional and local developments, further adding to the burden on infrastructure during peak seasons. This has resulted in fierce price wars during popular months and underutilization during low seasons.

The hotel industry, in particular, has seen rapid growth, owing to the increase of regional tourism and also due to tax exemption on imports of hotel items. According to a TCB study, the districts of Thimphu, Punakha and Paro already had an excess of 35 tourist standard hotels with 232 more cleared for construction in 2019. As of March 2020, there were 160 tourist standard hotels, with an estimated 500 more non-tourist standard hotels aimed at regional tourists.

A key issue with quality control of accommodation lies in the regulations for standard and non-standard hotels. While standard hotels are required to obtain technical clearance from TCB prior to construction, non-standard budget hotels are exempt from TCB’s mandate and can obtain licences directly from the Ministry of Economic Affairs (MoEA).

The rise in the number of budget hotels and a lack of data on their occupancy rates have resulted in a precarious situation of overdependency on regional tourists, further spiralling into a decline in quality services and facilities in the tourism sector.

Another bottleneck in the carrying capacity is related to air transport. Bhutan has only one international airport in Paro and only two airlines with limited destinations in the region, making travelling to the country a challenge. In 2019, for instance, over 93 percent of international tourists used air as a preferred mode of travel to Bhutan. While there had been surveys to establish an international airport in Gelephu town in the south-central district of Sarpang district, it was later downgraded to a domestic airport due to geo-technical feasibility issues. There has also been minimal interest for private airlines to operate in the international sector due to low business viability during the off-season.

8.4.3 Weak inter-agency coordination

Institutional weaknesses and bureaucratic complexities have exposed a key issue in inter-agency coordination. Various stakeholders have pointed to the weak level of organization and coordination among government agencies in regulating and promoting the tourism sector.

Government initiatives to stimulate the development of the tourism sector are diluted during implementation. For example, tax exemption on imports of goods for hotels are restricted by narrow definitions of exemptions by Customs officials. Investments for three-star hotels and above are encouraged, yet recruitment restrictions imposed by labour and immigration rules on foreign executives and trainers impede service improvement.
A lack of proper coordination between ministries, agencies and other stakeholders has led to duplication of effort and waste of resources. It is often the case that different organizations develop tourism activities without stakeholder consultation, resulting not only in duplication but also inaccurate research. Interviews with important sector associations such as the Hotel and Restaurant Association of Bhutan (HRAB), Association of Bhutanese Tour Operators (ABTO) and Guide Association of Bhutan (GAB) also underscore the need for more adequate stakeholder consultation for important initiatives.

### 8.4.4 Relevance of tariff model

A key point of debate within the tourism sector in Bhutan has been the effectiveness, and therefore relevance, of the tariff model. In the current system, international tourists are required to book all-inclusive tours via local tour operators within the Minimum Daily Package Rate, which also includes a daily Sustainable Development Fee of US$65. This package is inclusive of standard accommodation, a local guide, meals and transport around Bhutan.

While previously exempt, regional tourists are now also subject to a daily Sustainable Development Fee of BTN 1,200 under the new Tourism Levy Act of 2020. Guidelines on the management of these regional tourists have been finalized and will dictate the modalities of tours, including the payment mechanism as well as use of local tour operators, guides and transport.

For almost two decades, debate has been brewing on the future of Bhutan’s unique tariff policy. The debate has now taken a stronger significance with the inclusion of SDF for regional tourists and changing global trends in tourism have reignited the need to evaluate the tariff mechanism.

Opinions regarding the future of the tariff model can be grouped into four major positions: the status quo; a tweak in the MDPR and SDF, believing that either or both should be increased; the liberalization of the MDPR while retaining the SDF component; and full liberalization of the sector by removing both the MDPR and SDF. However, there has not been a thorough impact assessment study related to any of these proposed solutions.

### 8.4.5 Professional and capacity development

A major challenge for the tourism sector is the shortage and quality of the workforce. Reskilling and upskilling of professionals in the industry has not been a major priority. As a service industry, the delivery of quality of service is a key component in the tourist experience, but the sector lacks competency in the form of adequately trained guides, skilled workers in the hospitality sector, and qualified and experienced professionals in product development, destination marketing, digital and IT skills and other tourism-related services. Additionally, there is a need to improve employment conditions and benefits in the sector.

### 8.4.6 Low digitization and use of technology

Digital transformation has long been viewed as a critical and necessary step for the development of tourism in Bhutan. Despite numerous investments by the government in improving ICT infrastructure and services, along with attempts at promoting ICT adoption for tourism stakeholders, the sector has not been able to effectively leverage these tools for internal streamlining and external marketing. Payment gateway systems, flight payment ease, route and entry permit procedures, data and knowledge management, information dissemination portals and marketing efforts are some key areas that have not fully incorporated ICT solutions and instead have contributed to operational and logistical bottlenecks.
8.5 Recommendations to enhance yield and quality

8.5.1 Study on the impact of liberalizing the tariff structure and enforcement of the pricing mechanism

Key to the future and sustainability of tourism in Bhutan is a proper assessment of its tourism system. There is a need for an in-depth impact assessment study, based on evidence and facts, on the possible socio-economic impacts of liberalizing the MDPR, SDF or both. The policy of “High Value, Low Volume” remains the guiding philosophy, but the mechanism to achieve it may well need calibrating to maintain a sustainable tourism structure. Issues of undercutting, accounting leakages and overreliance on tour operators must be evaluated in developing and fine-tuning a more efficient tariff system.

8.5.2 Strategic product diversification

Suitable product diversification and improving the quality of these products and services is a major opportunity for Bhutan. The worldwide tourism and hospitality industry is an innovative and ever-growing industry. The demand of travellers for new and meaningful travel experiences emphasizes the need for the diversification of tourism products in Bhutan. For many years, the focus has been on cultural tours, occasionally combined with hiking or spiritual elements, but no real innovation has taken place in this area. Bhutan has much potential to attract new kinds of markets and travellers, especially in the market of well-being and wellness. In order to compete with other high-end destinations, there is a need for a well-planned strategy and action plan that outlines the development of new hospitality services and tourism products and includes anticipated costs.

8.5.3 Redefining cultural tours

According to the Tourism Council of Bhutan, every tourist in Bhutan consumes at least one cultural activity during their stay. In order to keep cultural tours attractive for new and repeating visitors, it is important that they are redefined in creative and innovative ways. Several options should be explored, including:

- Creating new routes and itineraries based on a combination of products: culture, nature, well-being/wellness and spirituality.
- Creating new content for each district, focusing on one or two unique selling propositions. Reducing visits to Dzongs and monasteries and including more lifestyle-related activities.
- Creating new stories about travelling in Bhutan, not only focused on culture, but connected to new lifestyle-related approaches for travellers, such as nature, wellness, transformation and healing.
- Improving the quality of food and accommodation offered during tours, in line with how much visitors spend.

8.5.4 Positioning Bhutan as a health and wellness destination

The current focus on health and wellness within the global tourism industry complements Bhutan’s long and rich history of cultural, medicinal and spiritual traditions. These concepts are embedded within the philosophy of GNH and the specific and unique character of Bhutan—its tranquillity, preserved nature and magical atmosphere—makes it one of the most attractive countries in the world to offer well-being related tourism services. What Bhutan as a country can offer has become a valuable good in global society. There has been serious growth in global travellers looking for well-being, balance, transformation and personal growth. These travellers are willing to spend more money than “regular” (i.e. culture and leisure) tourists.
They also travel in all seasons, tend to stay for more nights and return to a destination if they have had a satisfying experience. These are all factors that will contribute positively and sustainably to the tourism industry in Bhutan, which is why it is critical that Bhutan positions itself as a leading health and wellness destination.

Specific actions can include:

- Flexible MDPR for long-stay wellness visitors
- Flexible MDPR for visitors staying in one accommodation
- Special permits and recognition for well-being service providers
- Increase training of the workforce in well-being services, such as therapists, traditional medicine doctors and yoga and meditation instructors
- Development of a well-being service infrastructure.

8.5.5 Improving MICE infrastructure and promotion

Bhutan also has strong potential to develop Meetings, Incentives, Conferences and Events (MICE) tourism. Promoting the MICE segment helps mitigate the seasonal nature of tourism, while also ensuring sustainability due to visitors coming on a staggered timeline. In addition, MICE is associated with “bleisure” tourism (business combined with leisure), as business tourists tend to extend their stay to spend a few days discovering a destination.

In order to attract MICE tourism, Bhutan must invest in the basic infrastructure of transport accessibility and hotel and conference services and facilities. Public transport connections within and between cities and districts will provide a positive and strong selling point in enhancing visits by business tourists. There is also a need for a convention centre that meets international standards as the current infrastructure for MICE is currently limited to a few hotel conference halls.

Current regulations also require a minimum of 30 participants to quality for MICE discounts and participants’ spouses and partners are not eligible for any promotion. Such qualifications discourage smaller board, technical, pre-conference and standing committee meetings.

8.5.6 Leveraging technology and digital marketing

Major opportunity lies in utilizing technology to improve the ease and efficiency of operational processes as well as to garner a more effective market reach in this digital age:

- The tourism sector has yet to adopt a simple online payment gateway system that allows for convenient transfer of funds, especially for credit cards. The current system of bank wire transfer is cumbersome and time consuming.
- Immigration formalities and the waiting time on arrivals can be sped up with the use of passport barcode-reading machines, instead of manual typing of information.
- Data and knowledge management, especially in terms of taking stock of national tourism resources, should be digitized in order to improve analysis, market intelligence, monitoring and information-sharing.

The global tourism sector has been disrupted by the domination of digital channels, especially through the growth of social media and mobile technology. Tourism trends reinforce the importance, if not necessity, of digital marketing. At both the national and business levels, there is a pressing need to implement strong digital marketing strategies.
8.5.7  Strengthening tourism linkages

Tourism’s current linkages with other sectors are weak, owing to the complexity of the supply and demand chain, low levels of communication and cooperation, weak distribution networks, inadequate market information and non-attractive pricing against competing imports. Initiatives to strengthen linkages should include facilitation of consultations and meetings, training for representatives of the tourism sector and implementation of upstream and downstream value-chain analyses (VCA) in tourism. For example, hoteliers and suppliers from the farming, agribusiness, creative and manufacturing sectors can develop strategies to improve market information and distribution systems. Similarly, tour operators and those working in handicrafts, restaurants, tour attractions and manufacturers of tourism products can discuss ways to strengthen linkages by using local inputs and resources to increase the economic impact of tourism. These proposals require targeted investments in building the productive capacity of the agricultural, manufacturing and service sectors so that they can efficiently meet the growing demands of the tourism sector and contribute to the overall value chain.

8.5.8  Removing seasonal differentiation

The high dependency on cultural and leisure tourism largely accounts for the seasonal peaks in tourist arrivals. However, the differentiated pricing policy between “high” and “low” seasons hinders the promotion of year-round tour packages. This is a self-imposed regulation that should be reviewed and compared to the outcomes of a year-round uniform tariff. With stronger marketing and better product diversification, previously “low” seasons can be rebranded as attractive seasons for adventure, MICE and wellness tourism across a larger circuit region.

8.5.9  Improving booking operational efficiencies

Operational inefficiencies within various systems have caused a burden on the ease of doing business, with a direct impact on the reputation of Bhutan as a “difficult and complex” destination to travel to. Streamlining processes and enacting effective structural changes would be important and timely to reduce the burden on an already hindered sector. Specific measures that can be taken are:

- Tour payments to be accepted in all major convertible currencies. Currently, Bhutanese banks only accept USD payment, so tourists have to convert their currency and transfer payment in its USD equivalent.
- Foreign currency accounts for tourism businesses. Currently, multiple exchange rates are used while transferring payments, especially in the existing tour payment process when TCB receives, holds and transfers payments.
- Promotion of online payment gateways for tours and tourism payments. At present, the majority of tour payments are made through wire transfers, which are routed through corresponding banks that take longer and invoke a separate transfer charge. A comprehensive one-stop banking solution that incorporates card payments is necessary, along with a facility for direct payments to hotels and other service providers.

8.5.10  Professionalization and capacity-building of stakeholders

Service delivery is a critical component of the tourist experience. Training programmes for soft and hard skills should be conducted regularly for all stakeholders, from government officials to private sector practitioners, to improve professionalization, quality of services and cross-sector coordination. Consultation with stakeholders has revealed a need for capacity-building in the areas of marketing and packaging, ticketing and reservations, logistics coordination,
finance and budget, destination management, hospitality and guides upskilling, emergency and disaster management, waste management and communication skills.

In addition, the monitoring and evaluation of quality and standards should be strongly implemented. The process of certification for tourism service providers needs to be maintained at the highest level in order to uphold Bhutan’s high-value reputation. Apart from maintaining standards, certification also supports building credibility of the destination, confidence in service providers and self-monitoring modalities.

8.5.11 Promoting domestic tourism

In the wake of the COVID-19 pandemic, domestic tourism can play a critical role to help drive economic recovery. The World Tourism Organization expects domestic tourism to return faster and stronger than international travel. The government is currently implementing a host of initiatives to boost domestic tourism, including inviting private tourism suppliers to provide packaged itineraries in areas of eco-adventure, pilgrimage and trekking. TCB is also discussing proposals to have in-country travel programmes for public offices handled by private domestic tourism promoters.

Promoting domestic tourism will require strong initiatives focused on marketing and promotion, as well as financial incentives. Examples from other countries include travel discount vouchers and personal tax relief (in Malaysia), strong domestic tourism campaigns (in France), subsidizing hotel accommodation (in Thailand) and even direct cash vouchers to spend on local accommodation (in Italy).
References


CHAPTER 9
DIGITALIZATION, E-COMMERCE AND INDUSTRY 4.0
9.1 Introduction

As nations grapple with how to protect the health of their citizens from the COVID-19 pandemic, its impact on livelihoods and the slowing down of economic activities cannot be overlooked, especially in developing countries like Bhutan. While COVID-19 has undoubtedly resulted in negative impacts across sectors, market segments and businesses, it has also opened opportunities for Bhutan to accelerate its development. One way this can be done is by dedicating resources to establishing a digital economy ecosystem that promotes the integration of a variety of digital solutions across the nation’s priority sectors. In addition to catalysing digitalization, Bhutan can commence its transition to the Fourth Industrial Revolution, with the objective of strengthening its manufacturing capacities as well as exploring e-commerce solutions, to expand national and international trade capacities given the country’s landlocked nature.

Bhutan’s business sector is dominated by micro, small and medium-sized enterprises (MSMEs). Smaller firms make up 95 percent of the total number of businesses. Bhutan classifies (all or most) micro and small businesses under the heading of Cottage and Small Industries (CSI). Medium-sized enterprises can vary widely, with the official definition stretching from firms with 20 to 99 employees and an annual turnover between BTN 10 million and BTN 100 million. The Royal Government of Bhutan (RGoB) divides the MSME sector into trade (or retail) enterprises and industrial enterprises. The latter are further broken down into production and manufacturing, services and contract (construction contractors).

Digitalization opens opportunities for businesses, including MSMEs. These include:

- **Access to international markets through the dematerialization of borders**: MSMEs are able to participate in international activities from a distance, integrate democratization of consumption and access multiple markets with activities facilitated by their network capacities rather than relying solely on international relations.\(^{119}\)

- **Access to alternative revenue streams through digital platforms and the implementation of new digital infrastructures**: Through digital solutions, the use of open innovation, creating linkages with new development partners and increased investments in qualified human capital, MSMEs are presented with opportunities to develop more collaborative modes of operation.\(^{120}\)

- **Access to data and analytics on consumers’ preferences and behaviour**: Digital technologies can empower MSMEs with data and the use of data analytics to understand the needs of their consumers and international market requirements, allowing for increased participation in global value chains. Digitalization leads to a larger market, fast interactions between partners, consumers integrated into the ecosystem, faster internationalizing speed and better access to network skills and knowledge.\(^{121}\)

While MSMEs in Bhutan have much to gain from their participation in the digital economy, they face challenges to take advantage of these opportunities, arising mainly from:

- **Lack of connectivity**: In discussions with the Bhutan Chamber of Commerce and Industry, it was highlighted that the lack of access to appropriate ICT infrastructure (Internet connections, computers, etc.), especially in rural areas is the biggest challenge that private enterprises, most of which are informal, encounter. Due to this gap, enterprises lack the incentive to explore digital solutions and continue instead with their traditional ways of operation.\(^{122}\) In addition to ICT infrastructure gaps, the country faces important infrastructure deficits in areas such as roads and postal networks.

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\(^{120}\) Ibid.

\(^{121}\) Ibid.

\(^{122}\) Dorji, Sangay (2020). Interview by UNIDO, Secretary General Bhutan Chamber of Commerce and Industry, 24 September 24.
• Lack of digital awareness and trust: The concept of digitalization and its benefits is very new for Bhutan and therefore, there is low awareness about the potential of digital technologies and a lack of trust in the use of digital solutions. The RGoB has invested resources to develop digital initiatives to address this barrier; however, many stakeholders do not have an awareness of how digital solutions can benefit their lives.123

• Inappropriate ICT skills: MSMEs that are aware of and/or have access to digital solutions have made it very clear that their current skill sets are inadequate to maximize the advantages of digital technologies. Thus, MSMEs need support to develop the necessary skills and knowledge that will enable them to take advantage of the opportunities that e-commerce and the adoption of digital solutions, more broadly, provides.124

The COVID-19 pandemic has severely impacted Bhutan’s economic, social and industrial activity. MSMEs in Bhutan (like in many other developing countries) have been left in shock and limbo due to the negative implications. Severe liquidity crunches; slumps in demand; high recovery costs; and supply chain disruptions are some of the key challenges MSMEs have had to endure in this pandemic. Strengthening Bhutan’s Digital Economic Framework and promoting the mass digitization of MSMEs are crucial and essential to strengthen their resilience to future unforeseen and unprecedented situations. The Royal Government of Bhutan now has a unique opportunity and the impetus to catalyse national digitization activities. If MSMEs are given the opportunity to access digital technologies (such as computers, smart phones and applications) and skills, they can create digital storefronts to sell their products online; establish inventory management systems; augment their marketing potential; and access microfinance, among other benefits.125

The purpose of this chapter is to present an overview of the current trends and status, challenges and opportunities of the digital economy, Industry 4.0 and e-commerce in Bhutan. The chapter makes recommendations to enable Bhutan to overcome the key challenges in realizing its digital transformation.

9.2 The digital economy in Bhutan

The digital economy can be defined as the worldwide network of economic activities enabled by information and communication technologies (ICT) or simply as the economy based on digital technologies.126 Globally, with an ever-increasing number of people using digital services and more value chains becoming digitized, the role of digital data and technologies is set to expand further.127

According to UNCTAD’s Digital Economy Report 2019, the digital economy is becoming increasingly inseparable from the functioning of the economy as a whole. Figure 9.1 shows the components of the digital economy.

123 Ibid.
124 Ibid.
The growth of the digital economy can lead to many new economic opportunities and the associated impacts can be considered across several dimensions (e.g. productivity, GDP, value-added); different actors (e.g. workers, MSMEs, platforms and governments); and different components of the digital economy (e.g. the core digital sector, the IT sector and the digitalized economy).

From the point of view of different actors, the value added of the digital economy is outlined in Figure 9.2 below:

**Governments**
- To support COVID-19 recovery, the economic model promotes the utilization of data analytics to determine relevant policy and containment measures.
- Catalyse the development of new solutions for reformation of taxation and revenue structures.
- Promotes efficiency in terms of service delivery through implementation of e-government.

**Enterprises**
- Through digital platforms, firms can increase their access to news markets and drive down transaction costs.
- Increased digital fluency can lower the barriers to entrepreneurship and provide new sources of finance to small-scale start-ups.
- The poor can access new inclusive services by accessing mobile telephony platforms, which are affordable and extremely innovative.

**Industry**
- Digitalization facilitates production of more and better goods and services.
- Data and information can be used in enhancing efficiencies of processes and promoting access to markets.
- Utilization of data will allow industry to offer on-demand goods and services as well as customized products.

**Individuals**
- Facilitate access to more variety and choices of goods and services at lower costs.
- Provide convenience as well as customized or personalized products and services.
- In terms of employment, an expanding digital economy in developing countries can generate new high-skilled jobs (requiring relatively advanced technical and analytical skills).


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Under the paradigm of the digital economy, it is important to recognize that a majority of developing countries start from a challenging position as they encounter a combination of problems including, but not limited to, extreme poverty, low human capital, ineffective institutions and non-conducive business environments. This is further compounded by the fact that many communities in these countries do not have sufficient access to the required digital infrastructure to participate and contribute to this economic model. However, the spread of COVID-19 across the globe has necessitated all countries to heavily invest in a digital and technological future to accelerate their recovery efforts; increase their resilience to future crises; and promote the attainment of their national development agendas.129

9.2.1 National development implications of transitioning to the digital economy in Bhutan

The RGoB aspires to create an ICT-enabled knowledge society to contribute to the country’s very high Gross National Happiness. The government acknowledges that a strong digital infrastructure that provides access to affordable and reliable high-speed Internet is fundamental to this vision. Such an approach can promote digital inclusion; help close gaps between socio-demographic groups; and open economic opportunities. Digital competencies and market-driven skills, from basic digital literacy to advanced IT skills are integral components for human capital development and a base for the economy of the future.130

By supporting the proliferation of digital technologies, Bhutan, despite its landlocked status, will be able to provide opportunities for individuals and businesses to create links with new markets and trade flows. These opportunities flow not only from the ICT sector itself but also from the use of ICT in sectors across the economy. This creates new sources of growth as transaction costs fall and markets expand.131

9.2.2 Status of Bhutan’s digital economy since DTIS 2012

The presence and integration of ICT across sectors represents a core requirement for any country to establish their digital economy. In Bhutan’s DTIS 2012, there is a clear recognition that ICTs, with an emphasis on IT-enabled Services, are a crucial business opportunity for the country’s national development agenda. In Box 9.1 below, a snapshot of the country’s current ICT infrastructure since 2012 is presented.

Box 9.1: Summary of main achievements and setbacks since DTIS 2012

In Bhutan’s Diagnostic Trade Integration Study (DTIS) 2012, the diffusion of wireless ICT services was mentioned as reaching most parts of the country but remained largely focused in Thimphu, with a very slow uptake. Bhutan scored low in the 2011 edition of the International Telecommunication Union (ITU) Internet Development Index, where it ranked 119th out of 152 countries. Recent literature has shown that Bhutan has progressed significantly in providing its population with access to ICT Infrastructure since the DTIS 2012.

Before the advent of mobile devices, fixed-line telephone was the only channel for voice communications in the country. Bhutan Telecom Limited (BTL) was the sole service provider that offered voice, dial-up and broadband Internet services. As of December 2017, there are approximately 21,364 fixed telephone subscribers with a penetration rate of around 2.7 percent. The growing prevalence of mobile devices has caused fixed-line subscriptions to decrease steadily in the country.

Mobile services were introduced in Bhutan in 2003 and initially, only had 2,000 subscribers. This figure has grown substantially since then and by 2017, the number of subscribers reached 709,431, with a penetration rate of 90.9 percent. The growth of mobile infrastructure can be partly ascribed to the Rural Communications Project carried out by the Bhutan InfoComm and Media Authority from 2009. The project aimed to connect unconnected villages with mobile services. As of 2017, BTL had the majority market share (62 percent) with TashiCell covering the remaining percentage of the market.

In October 2013, BTL begun to provide 4G services, which also became available and accessible throughout the country. TashiCell has been a bit behind BTL’s progress. It launched its 3G service only in December 2013 and 4G service in 2016; both became available nationwide in 2018. The total number of mobile Internet (3G and 4G) subscribers has reached 618,960 with a penetration rate of 79.4 percent. In the 2017 ITU Internet Development Index, Bhutan’s position dropped to 121st out of 152 countries. This drop can be largely ascribed to the presence of low ICT skills and reduced access to computers and stable Internet connections in the country. Looking ahead, Bhutan can leverage its high mobile penetration and adoption among communities to address its digital development agenda.

Since 2012, the RGoB has put in place the following policies and guidelines to strengthen the ICT sector recognizing its critical role in supporting the growth of the economy:

- The Cottage and Small Industry Policy 2012 aimed to promote entrepreneurship, alleviate poverty in rural areas, contribute towards employment generation, and proposed “maximizing the use of e-businesses, developing science and technology centres.” This resulted in the establishment of Bhutan’s first technology park in May 2012, with a total of 20 companies, 7 of which are foreign, employing over 700 persons.
- The Cottage and Small Industry 2019 policy put in place an e-commerce regulatory framework.
- The National Entrepreneurship Strategy 2015 presented by the Ministry of Labour and Human Resources highlighted the need to facilitate technology exchange and innovation and set up incubation centres across their technical training colleges to promote it.
- The Economic Development Policy 2016 of the Ministry of Economic Affairs put in place digitalization initiatives such as the Government to Business (G2B), ePortal and iGuide services online to facilitate business services and clearances.
- The Royal Monetary Authority joined the RuPay Network promoting cross-border interoperability in conducting banking transactions using local bank ATMs, debit cards, point of sale (PoS) and merchant’s e-commerce sites.
- The Foreign Direct Investment Policy 2019 liberalized the investment regime encouraging foreign direct investment (FDI) in the green and sustainable economy to foster new technology and skills. Since 2012, 16 FDI firms have been approved in the Information Technology–enabled Services (ItSeS) sector making it the second sector after tourism to attract the most FDI in Bhutan.
- The Bhutan National Financial Inclusion Strategy 2019–2023 led by the Royal Monetary Authority put in place the Bhutan Immediate Payment System (BIPS) platform to facilitate the payment gateway launched in 2017 for interbank mobile banking and Internet banking services. In addition, the RMA put in place the E-money Issuer Rules and Regulations 2017.

There has also been a focus on enhancing ICT security and a clear ICT Legislation Policy and Standards have also been put in place.

- The iDzodrak ICT Industry Development Plan 2016–2020 has put in place 14 programmes and 34 projects under the Royal Government of Bhutan to develop the ICT industry in order to increase ICT jobs as well as increase revenues and boost the private sector.

In addition to the necessity of IT infrastructure, other considerations need to be met to ensure that Bhutan can adapt to and establish its model of a digital economy. One requirement is the development of a cohesive ICT policy. In Bhutan’s DTIS 2012, experts who reviewed the existing ICT policy, the Bhutan Information, Communication and Media Act (BICMA) 2006, noted that while it was comprehensive, there was a tremendous focus on primary legislation and it therefore needed to be updated to reflect current practice. Furthermore, provisions for data and consumer protection; privacy rights; and intellectual property (IP) need to be strengthened.

Bhutan’s 2018 BIMCA addressed these observations by including dedicated legislation on cybersecurity privacy and data and consumer protection. However, the IP sections on intellectual property are still very limited. This is the only clause that makes mention of IP: “In case of violation of copyright or other intellectual property or related rights by a licensee or permit or authorisation holder, an action whether in civil or criminal law shall not be brought against the Authority or any Member or employee of the Authority merely on the ground that the Authority granted a license, permit or authorisation under this Act”.

In addition to the development of relevant laws and policies, an institutional framework that guides all stakeholders (government, businesses, associations, consumers, etc.) to take advantage of the opportunities offered by the digital economy is essential. In the DTIS 2012, there was a recognition that the government must develop and implement government-wide enterprise technology plans and develop and maintain a government-wide enterprise view and governance model to oversee the e-government transformation. The report also stressed that an enterprise-wide IT plan will support the promotion and adoption of a common and consistent IT architecture based on currently accepted enterprise standards. To follow-up on this observation, the government initiated several initiatives to establish this digital economy framework. Summarized below are some of the key initiatives that the government has spearheaded to catalyse its digital transformation efforts:

- **Digital Drukyul**: This is Bhutan’s flagship programme to harness the power of ICT to transform Bhutan into a smart and inclusive society. The overall objective of this programme is to empower citizens by digitizing public services in the areas of health care, education and business (among others). The key components of this initiative are: Integrated Citizen Service; E-Patient Information System; Digital School; E-Business (Business Licensing and Single Customs-Trade System); One Digital Identity; Government-Initiated Network; and ICT Capacity and Capability.

- **iDzodrak ICT Industry Development Plan 2016–2020**: This dedicated strategy has a vision to develop a sustainable ICT Industry that can support the implementation of Bhutan’s strategic priorities. The three tenets of this strategy are the creation of 2,550 ICT jobs; increase revenues from the ICT sector to BTN 6.4 billion; and support 5,000 enterprises to increase their adoption of ICT technologies. The strategic thrust areas of this initiative are fostering innovation and entrepreneurship; ICT skills development; investments in infrastructure; and creation of new markets.

- **Bhutan’s 21st Century Economic Roadmap**: The objective of this preliminary draft report is to prepare Bhutan for the next decade of the 21st century (2021–2030) and ensure that the national economic development approach adapts to global trends and results in furthering the country’s Gross National Happiness. Among the identified key drivers to promote this vision is the further integration of ICT and digital technologies across sectors.

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Emphasis on skills development; application of technologies in traditional sectors; and social innovation have been identified as quick gains to commence the implementation of this roadmap.135

- **National Entrepreneurship Strategy (2015):** UNIDO and the Royal Government of Bhutan developed a joint strategy to catalyse the development of an entrepreneurship ecosystem to contribute to the development of Gross National Happiness. The key thrusts of this strategy are to instil entrepreneurial values; promote awareness; and address entry/exit barriers to entrepreneurial activities.136

The DTIS 2012 also highlighted the government’s priority to develop an e-procurement system to strengthen the capacity of the private sector, in particular enabling Bhutanese small and medium-sized enterprises to use ICT trading platforms as a way of doing business that will make them more efficient and more trade and export ready. The report highlighted that Community Centres (CC) in each Gewog are central to the development of an e-procurement platform. There were plans to establish 205 CCs; however, at the time of the report, funding was only available for 160 communities. There were only 65 Community Centres constructed in 2011, of which only a handful were operational. The RGoB had plans to build 100 Community Centres by the end of December 2011 with 50 having Hole in the Wall (HiTW) facilities for children and young people.137

As of January 2014, the RGoB had established 182 Community Centres and planned to link 131 of them to broadband Internet. Furthermore, between 2010 and 2015 and through cooperation with the Government of India, the RGoB has implemented a five-year capacity-building initiative (Chiphen Rigpel), which has provided ICT training for a comprehensive set of stakeholders (including government officials, business owners and citizens). This programme also involved setting up learning stations in Community Centres.138 In an interview conducted with the Bhutan Chamber of Commerce and Industry (BCCI), it was stated that Community Centres have all the infrastructure to offer core services but there was a recommendation for more resources to be invested in improving the connectivity of these centres—as this is a barrier preventing the successful adoption of digital solutions in these centres, especially in rural Gewogs.139

In 2012, the RGoB planned for the development of 160 Government to Consumer (G2C) services (only 13 were available at that time). The DTIS 2012 report stressed that Community Centres would play a key role in the effective rollout of G2C services. It was stressed that Community Centres must provide people with information and services that deal with government, jobs, business opportunities and access to information about health issues and education. A key recommendation in the DTIS 2012 with respect to the establishment of Community Centres was to develop an e-commerce platform that local businesses can use to help local businesses realize the benefits of access to the Internet and to sell local goods and services to local and distant markets. It was also recommended to develop a customized e-procurement platform for each Community Centre. This procurement platform was expected to provide trade-related services information available over the Internet, promote access to job opportunities; and offer opportunities for advertisement.140

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139 Dorji, Sangay (2020). Interview by UNIDO, Secretary General Bhutan Chamber of Commerce and Industry, 24 September 24
Community Centres are promoting access to e-commerce platforms such as bhutanbuy.com and zala.bt—although the services offered remain limited (refer to e-commerce section for more information). It was also noted by the Ministry of Economic Affairs (MoEA) that the government has launched a national e-procurement platform to provide citizens with access to information on key government services, jobs and health information through mobile devices. However, the development of customized e-procurement platforms for Community Centres have yet to be established but are planned in the 12th Five Year Plan (FYP).  

9.2.3 Challenges of transitioning to a digital economy

While Bhutan has shown high willingness and readiness to “go digital”, there are general barriers which need to be addressed to ensure that the visions laid out in the aforementioned strategies can be fulfilled. The key challenges where interventions are required are summarized below:

- Despite having an ICT policy and strategy in place, the country was ranked 121 out of 176 in the 2017 ICT Development Index, which takes into account access, use and ICT-related skills. Fast, reliable and affordable Internet connectivity with the rest of the world along with skills development is essential for the ICT sector to develop.  
- Domestic demand for ICT services remains weak and this is largely due to a high reliance on public sector ICT projects. While internationalization and the export of ICT services is important, there is a need to create a domestic demand for ICT services which can be achieved through innovative awareness campaigns.  
- There is a strong necessity to promote the use of IT services across sectors as much as possible through the development of relevant policies. The World Bank found that only a fifth of Bhutanese older than 15 have made or received a digital payment, compared with a third in Bangladesh and almost half in Sri Lanka. They also find that limited digitization of the economy means fewer job prospects for the 300 ICT graduates who enter the workforce every year.  
- There is a lack of analysis and statistics available on the key skills required to fully take advantage of the current digital technologies available. This makes it challenging to ensure a proper match between the ICT workforce and enterprises in terms of supply and demand. The World Bank finds that approximately 60 percent of non-farm private sector employers believe their workers have insufficient ICT skills and 35 to 40 percent believe they have insufficient teamwork, leadership and problem-solving skills. Their findings further indicate that the foundations for these types of skills are instilled early in life.  

9.2.4 Recommendations for the transition to a digital economy

While Bhutan has recognized the value of digitization, there are still barriers that are preventing the country from transitioning to a digital economy. Some key recommendations for consideration of decision makers to catalyse the country’s digital transformation are:

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141 Chedup, Sonam (2020). Interview by UNIDO, Zoom Meeting, 21 September.
1. Digital Bhutan One House Approach: As illustrated in this chapter, the government of Bhutan has launched many initiatives and policies to support the digital transformation of the country. However, in interviews, national stakeholders commonly stated that there was no coordination between the various visions. Hence, to ensure Bhutan is promoting a cohesive digital vision both nationally and internationally, it is imperative that all lead agencies for each digital strategy and vision come together to develop a digital approach under one roof – “Digital Bhutan.” Such a strategy will build the confidence of global development partners to initiate and invest in projects to support Bhutan digitalization aspirations.

2. Promote dialogue on IT infrastructure with India and Bangladesh: As previously mentioned in the DTIS 2012, it will be important to bring together IT stakeholders from Bhutan’s neighbours to discuss and negotiate how Bhutan can leverage and create linkages to their existing infrastructure (especially in rural areas). International organizations can act as the interlocutor for these discussions to present the value addition of such an activity. Bhutan can use this dialogue to highlight its digital progress to these countries (e.g. Thimphu TechPark; Section 9.3 on Industry 4.0 for more information) and discuss how joint collaboration can be developed to strengthen digital cooperation. A potential point of discussion in these dialogues is the availability, allocation and use of existing mobile spectra and their availability across borders. The continuation of traditional licensed spectrum (which is usually targeted at operators in connection with delivering ubiquitous and predictable quality of service) as well as the promotion of new spectrum sharing models, including both licensed and unlicensed shared access can facilitate more access to mobile spectra in Bhutan. Another discussion point could be to explore Internet Protocol (IP) Interconnection Agreements between network providers in each country. Settlement-free peering (wherein two network providers agree to accept traffic from each other, free of charge); paid peering agreements (wherein a network pays another to participate in a peering arrangement that allows faster throughput and information exchange); and transit agreements (under which a party pays a network provider to accept traffic that is destined to or from another network anywhere on the Internet) are potential modalities to increase access to the Internet.147

3. Brand Bhutan—to include Information Technology–enabled Services: Brand Bhutan is a country flagship branding initiative to promote Bhutanese products globally. In consultations with stakeholders, it was suggested that this initiative should be expanded to reflect services as well as products, and more specifically, Bhutan’s attractiveness as a nation with Information Technology–enabled Services, which would align with the recommendations in DTIS 2012. Bhutan has success stories, which can be marketed effectively to attract FDIs in support of Bhutan’s digitalization journey.

4. Development of digital financial incentives: It has been shown and proven in other developing countries that the provision of financial incentives to support enterprises to adopt digital technologies has catalysed a nation’s digital transformation efforts. It is strongly recommended that Bhutan and international development partners conduct a detailed study on the essential digital technologies that need to be integrated into their key economic activities (along with associated enterprises). On the basis of its findings, the government can replicate the best practices for incentive development for the identified technologies. Another option could be the development of a national technology fund which can support the digitalization of enterprises that are ready for it.

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9.3 The Fourth Industrial Revolution in Bhutan

The Fourth Industrial Revolution (I.4.0) is the trend of automation and data exchange in manufacturing. In this new industrial paradigm, companies are applying innovative solutions, including through Artificial Intelligence, Big Data, “Internet of Things” (IoT), cloud computing, miniaturization and 3D printing, that will enable more interoperability and flexible industrial processes and autonomous and intelligent manufacturing. The physical components of industrial production are being transformed by smart, digital networking into cyber-physical systems (CPS), allowing for the management of production processes in real-time across great distances and being able to create customized products.\footnote{UNIDO (2017a). Industry 4.0 – Opportunities and Challenges of the New Industrial Revolution for Developing Countries and Economies in Transition. Vienna: UNIDO. Available at https://www.unido.org/sites/default/files/2017-01/Unido_industry-4_NEW_0.pdf.}

There is broad consensus internationally about the potential large-scale impact of Industry 4.0 in global manufacturing. For firms, this new paradigm offers the opportunity for higher efficiency, flexibility, speed and responsiveness, precision and customization in production and business operations. The flexibility to adapt manufacturing systems enabled by this model can allow firms to be more responsive to disruptions in demand and supply.\footnote{University of Cambridge and UNDP (2020). Adaptation and Adoption of Industry 4.0 in Cambodia. Phnom Penh: University of Cambridge and United Nations Development Programme. Available at https://www.undp.org/content/dam/cambodia/docs/ResearchAndPublication/2020/Industry%204.0%20Report%20Final.pdf.}

At the industry level, I.4.0 allows for the development of new products with increased productivity; promotes efficiencies in processes through increased automation; enables forecasts for supply chain input and demand requirements; and creates stronger links between the design, production and delivery chains.\footnote{Ibid.}

At the scale of countries, I.4.0 represents an opportunity to establish a dedicated sector focusing on this industrial paradigm and can contribute heavily to economic diversification.\footnote{UNIDO (2018). The belt and road initiative: Industry 4.0 in sustainable and smart cities. Vienna: UNIDO. Available at https://www.unido.org/sites/default/files/files/2018-03/Unido_BRL_summary_web.pdf.}

There is scope for instance, to promote the development of “smart cities”, providing high-quality public services and a better quality of life for citizens.\footnote{Ibid.}

Industry 4.0 similarly offers the potential to cultivate a sustainable work–life balance and provide increased safety in the workplace,\footnote{Ibid.} bringing benefits to workers. On the other hand, there are concerns about the employment impact of new technologies under I.4.0 in the absence of adequate preparedness and concerted efforts between governments, businesses and labour organizations in ensuring a smooth transition, including through lifelong learning systems.

9.3.1 Status of Industry 4.0

For any developing country to transition to Industry 4.0, it is imperative that key elements are present across economic sectors. Summarized below are some of the key factors that countries can implement to start their transition to this new industrial model:


\footnote{University of Cambridge and UNDP (2020). Adaptation and Adoption of Industry 4.0 in Cambodia.}
Automation and robotics are integral pillars for this industrial model. In economies that are already in Industry 4.0, these technologies are often applied to perform complex assignments along the manufacturing process. There is also a trend where robotics and human tasks are synergistic and promote operational efficiencies. Additive manufacturing (3D printing) is another technology associated with this revolution. Through the utilization of computer models and simulations, this technology empowers people with access to this technology to, for instance, test and streamline the machine settings for the item even before creation begins, accordingly reducing the time-consuming machine set-up process. The coordination of data frameworks and information systems is necessary to reap the opportunities offered by this industrial model. Notable application of this concept is the addition of sensors to existing production hardware to enable different technologies on the shopfloor to communicate with each other and contribute to increased output optimization through data communication.

Box 9.2: Observed and expected impact and additional challenges emerging from the COVID-19 crisis – Testimonial from the Bhutanese Association of Women Entrepreneurs

Bhutan has not been immune to the impacts COVID-19 has had on the activities of businesses, especially micro, small and medium enterprises. The Bhutanese Association of Women Entrepreneurs (BAOWE) testify that there has been a strong impact on women-led entrepreneurs. Among other challenges, BAOWE has underscored the need to address the lack of effective, efficient and economical marketing networks connecting rural farmers, most of whom are women, to urban consumers. This pandemic has exacerbated the pre-existing challenges women farmers have in selling their produce to customers and has forced them to either let their good produce rot in the fields or offer it as food for their animals.

In a consultation meeting with the President of BAOWE, she presented an example of a female watermelon farmer from Trashigang who desperately called her nephew in Thimphu asking help to sell her watermelons. The nephew was able to find an individual buyer who bought her watermelons at a low price. This individual went on to sell these watermelons for a profit to a bigger buyer and so on. BAOWE found out that the consignment of the farmer’s watermelons changed ownership several times throughout the value chain resulting in escalating logistical costs (including costs to load and unload the products, pilferage, etc.) before finally reaching eager customers in Thimphu. This resulted in the watermelon farmer earning only BTN 30 when the selling price in Thimphu was BTN 200. Because of this experience, the farmer is now refusing to sell to local buyers in the future.

According to BAOWE, this narrative is very common and may be the reason why many farming fields in Bhutan are lying fallow. To avoid perpetuating this ongoing challenge, there is an urgent need to create a platform where rural farmers are assured that they have the best price while retailers benefit by buying directly from rural farmers, cutting out numerous intermediaries, resulting in the end consumer benefitting the majority. This will ensure that happy farmers grow more by further bringing down costs enabling them to compete and sell in global and niche markets.

Source: Damchae Dem 2020.

- Automation and robotics are integral pillars for this industrial model. In economies that are already in Industry 4.0, these technologies are often applied to perform complex assignments along the manufacturing process. There is also a trend where robotics and human tasks are synergistic and promote operational efficiencies.
- Additive manufacturing (3D printing) is another technology associated with this revolution. Through the utilization of computer models and simulations, this technology empowers people with access to this technology to, for instance, test and streamline the machine settings for the item even before creation begins, accordingly reducing the time-consuming machine set-up process.
- The coordination of data frameworks and information systems is necessary to reap the opportunities offered by this industrial model. Notable application of this concept is the addition of sensors to existing production hardware to enable different technologies on the shopfloor to communicate with each other and contribute to increased output optimization through data communication.
For the Industry 4.0 model to operate successfully, it is important that information sharing across destinations and different stakeholders is seamless. A technology that contributes to this is cloud-based data systems that support remote Manufacturing Execution Systems (MES). To establish these systems, cloud technologies take advantage of Big Data Analytics to support the identification of hidden patterns, market trends, unknown correlations, customer preferences and other parameters to create efficiencies and added value.\textsuperscript{157}

Through discussion with different national stakeholders, it was found that Bhutan’s current industrial development is at a stage where Industry 4.0 does not have solid traction in the country and has yet to percolate across sectors.\textsuperscript{158} However, Bhutan does recognize the potential Industry 4.0 offers to accelerate the achievements of its digital aspirations.

A key initiative that is demonstrating the country’s entry into this new industrial paradigm is the establishment of the Thimphu TechPark, which aims to increase productive employment in Bhutan through the promotion of enterprise development in the ICT/ITeS sector, enhance ICT skills and improve access to finance. Most recently, the Chief Executive Officer (CEO) of Thimphu TechPark, Tshering C. Dorji stated that a Centre of Excellence in Information Technology will be established comprising of a team of competent IT professionals in software development.\textsuperscript{159} It is envisioned that the experts will have knowledge in implementing Enterprise Resource Planning (ERP) solutions, email and collaboration tools, data centre services, cloud computing and cybersecurity, as well as emerging technologies such as AI, data science, block-chain and the Internet of Things (IoT).

In the first phase, this Centre of Excellence will rely on hiring international experts to support its operations. This will be complemented by activities that will develop and enhance internal capacities in the long run.\textsuperscript{160} Thimphu TechPark helped to make the technology ecosystem more vibrant and stimulated the growth of the nascent ICT sector in Bhutan. The establishment of this park has enabled a new breed of ICT and ICT-enabled services companies to open and develop, serving clients outside Bhutan. These companies have employed Bhutanese professionals, some of whom have left their lucrative jobs abroad and returned home to be closer to their families. The TechPark has also encouraged students to choose to study ICT or computer science as their stepping stone to new opportunities that have now become available. The TechPark has also been able to create a link with Secure Link Services from Switzerland to carry out recruitment drives in major colleges and offer letters on the spot, with stipends, during the final semester. Thimphu TechPark has consistently provided direct employment to more than 600 Bhutanese over the last four years. The TechPark’s successful incubation centre has played a big role in spawning new ICT start-ups, such as Nano, Housing.bt, DrukRide, Bhutanbuy.com, Freelancer Bhutan and OneClick Shop, among others, which are still very active in the technology ecosystem of Bhutan.\textsuperscript{161}

Together with the Massachusetts Institute of Technology (MIT), Bhutan has established a FabLab. This is a network platform for inventors, researchers, entrepreneurs and creative people to exchange knowledge, ideas and technologies—to empower people to experiment and develop products that address real-world problems and create opportunities to improve

\textsuperscript{157} Ibid.
\textsuperscript{158} The stakeholders were the Ministry of Economic Affairs, the Bhutan Association of Women Entrepreneurs, and the Bhutan Chamber of Commerce.
lives and livelihoods at the local, national and global levels. This institution has received a positive reception by the Bhutanese community that has resulted in the establishment of Super FabLab (SFL) at the end of 2020. The SFL is expected to have machinery, software and platforms to prototype ideas to solve Bhutan’s development barriers. It is envisioned that the SFL will be the prototyping hub for the country and provide the platform for individuals, established corporations and the business sector to test and simulate their ideas as well as catalyse the development of innovative and technology-centric start-ups.

9.3.2 Industry 4.0 challenges

Bhutan is still at the infancy stages of transitioning to the Fourth Industrial Revolution. Hence, the challenges the country faces to transition to this model are very similar to those found in other developing countries. Summarized below are Industry 4.0 barriers that need to be addressed in emerging economies:

- Unlike the previous industrial revolutions, Industry 4.0 will not solely rely on attracting global investment simply by providing low-cost labour and low- to medium-skilled jobs. It will require countries to invest in technological modernization of their sectors as well as undertake relevant skills development. Currently, many newly industrialized countries have driven their economic growth by supplying an abundance of low-skilled labour. In this context, Industry 4.0 is not currently going to be a silver bullet for developing countries, especially low-cost manufacturing export countries.

- Industry 4.0 has long been predicted to trigger a new wave of outsourcing and in-shoring with new technologies, such as additive manufacturing and 3D printing, rendering some outsourcing unnecessary. With increasing prevalence of Industry 4.0 in developed countries, in-shoring is becoming a new trend, depriving developing countries of job opportunities.

- A major challenge that is hampering Bhutan’s progress to Industry 4.0 is the lack of access to reliable Internet infrastructure and/or connectivity. This largely stems from Bhutan’s reliance on India to develop the required International Internet Gateway (IIG) links. The country’s only IIG is at Phuentsholing and the government is currently in discussions with India and Bangladesh to explore the establishment of IIG’s in Gelephu and Samdrup Jongkhar. Furthermore, the cost of accessing Internet services is extremely high when compared to its regional neighbours. In 2014, the cost to access 1 Mbps of Internet in India was 6,000 INR/month and 9,375 INR/month in Nepal. In Bhutan, the cost is as high as 48,000 INR/month.

- To participate effectively in this industrial model, fluency in science, technology, engineering and maths (STEM) qualifications will be imperative to leverage the new manufacturing jobs. His Majesty the King has encouraged citizens to prioritize STEM education and wishes to see Bhutan have an enrolment rate in STEM education programmes at the

tertiary level at 50 percent in 2027, up from 35 percent in 2017. While many schools and universities are introducing ICT programmes and modules to boost and complement STEM uptake among students, it has been found that among graduates from reputable universities, such as the Royal University of Bhutan, there is a strong mismatch between their acquired skills sets and the global and national supply and demand requirements.\(^\text{6}\) Bhutan has recognized the need to introduce digital and ICT skills development as early as possible among students. Currently, schools in the country offer ICT courses from Grades I through X. However, the shortage of qualified ICT teachers; lack of access to essential technologies (computers, tablets etc.); and lack of availability of online courses are some of the key challenges that primary and secondary institutions encounter when trying to increase the digital skills of the next generation.\(^\text{6}\)

9.3.3 Industry 4.0 opportunities and recommendations

Bhutan, while at this very nascent stage in its Industry 4.0 development, has an opportunity to learn from other economies that have already commenced their transition to this new model. Some key opportunities that Bhutan can explore to catalyse its transition to Industry 4.0 include:

1. Bhutan Industry 4.0 Roadmap: The preparation of this document is crucial for Bhutan to take critical stock of its Industry 4.0 status and determine potential avenues where technologies associated with this industrial paradigm can be integrated across priority sectors and stakeholders.\(^\text{1}\) This assessment should endeavour to follow a three-stage process:
   - Conduct a readiness assessment, which focuses on the analysis of Industry 4.0 across different dimensions (economic, trade, employment, skills, regional ecosystem, etc.). A checklist operationalizing different levels of readiness could be used as a basis for this analysis.
   - Following the readiness assessment, a gap analysis should be conducted to describe the gap between existing capabilities (the status quo) and needed capabilities. This analysis should form the basis for the scope and ambition of planned Industry 4.0 projects.
   - Based on the first two analyses, a national Industry 4.0 roadmap can be developed to integrate and reflect the needs of all stakeholders.

2. Thimphu TechPark expansion: The two main objectives of this institution since its foundation in 2012 has been to: a) attract and facilitate FDI companies to lease commercial space within the 58,000 square feet building and b) manage the Bhutan Innovation and Technology Centre, which contains Bhutan’s first incubation centre and a Tier-2 data centre. Some of the key achievements of this institution are a visit by his Majesty the King; providing employment opportunities for around 600 youth since 2016; incubating several popular start-ups; and contributing to the development of IT infrastructure. There is a strong recommendation to consider the development of the adjacent 13-acre land set aside for ICT Park expansion through a new public-private partnership (PPP) project. Among other activities, it is envisaged that this will jump-start Bhutan’s transition to Industry 4.0 by hosting demo and acceleration centres and organizing Industry 4.0 workshops, TED-style talks, and more.\(^\text{1}\)


It is strongly suggested that the establishment of a dedicated Observatory be considered in the expansion plans to quantitatively measure the progress Bhutan is making towards transitioning to Industry 4.0 as well as act as a convening institution to form new partnerships. The expansion of the TechPark can also benefit from conducting a detailed analysis of best practices in the region; the Association of Southeast Asian Nations (ASEAN) would be a good starting point.

3. Development of STEM programmes: The Royal University of Bhutan (RUB) is currently implementing an internal strategic review to ensure that its curriculum accurately empowers students upon graduation to meet the labour requirements of the country in terms of supply and demand. However, Bhutan cannot solely rely on the RUB to drive this change and other institutions must also help. Therefore, it is strongly recommended that the RGoB catalyse the launch of the following programmes that are currently under discussion:

- Bachelor of Science in Cyber Security, Bachelor of Multimedia and Animation, Bachelor of Science in IoT/AI/VR/AR, Master of Science in Information Technology and Master of Science in Cyber Security at Gyalpozhi College of Information Technology.
- Bachelor of Engineering in Mechatronics at Jigme Namgyel Engineering College.
- Bachelor of Science in Data Science and Analytics at Sherubtse College.

9.4 E-commerce in Bhutan

E-commerce is one of the components of the digital economy. While there is no agreed definition on e-commerce, it can simply be described as, "goods and services sold and bought online through digital platforms (including mobile applications)."

The key opportunities that e-commerce represents to enterprises include:

- Access to new markets and increased sales: E-commerce empowers enterprises to enter new territories and markets in a simple, digital and cost-effective way. E-commerce grants manufacturers an increased reach and greater brand awareness, which can yield larger sales opportunities.
- Promoting efficient operations mechanisms: E-commerce can improve backend efficiencies by seamlessly integrating the manufacturer’s Enterprise Resource Planning (ERP) and Customer Research Management (CRM) into the overall e-commerce IT architecture. E-commerce can also inspire enterprises to explore the possibility of new technological integration to promote business optimization, for example, the utilization of big data analytics to understand market trends and therefore tailor their offerings on e-commerce platforms.

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174 Ibid.

175 Ibid.
9.4.1 Status of e-commerce

From a global perspective, the halting of global economic activities, lockdowns and social distancing as a result of COVID-19 has led to spikes in business-to-consumers (B2C) and business-to-business (B2B) e-commerce. This surge can be ascribed to the increased demands and stockpiling of essential products such as hand sanitizers, disinfectants, surgical facemasks, toilet paper and non-perishable foodstuffs.\textsuperscript{176}

The spillover effects of increased online shopping globally has resulted in an increased demand for a wide range of digital services, which has caused several brick-and-mortar businesses to migrate to e-commerce platforms. The increase in the number of consumers flocking to digital services has also spurred both suppliers of these services and telecommunications operators to enhance their network capacity and to offer advantageously priced or free data and service packages.\textsuperscript{177}

As mentioned in previous sections, Bhutan, despite its late entry into the ICT sector, recognizes the potential opportunity in disseminating information and bringing efficiency, transparency and accountability to delivering different services. It is important to stress that ICTs have increasingly emerged in every aspect of life and the dissemination, propagation and accessibility of these technologies are integral to a country’s development strategy. The RGoB is ensuring that ICTs are implemented in a manner such that technology does not severely impact the country’s unique Gross National Happiness concept.\textsuperscript{178}

Bhutan recognizes that the development and growth of e-commerce and e-services are synergistic with the development and improvement of ICT facilities and technology. The current status of e-commerce development is summarized and presented below:

- From a policy perspective, Bhutan has developed several strategies and visions to establish a framework to develop an independent and sustainable e-commerce ecosystem. In Bhutan’s 11\textsuperscript{th} and 12\textsuperscript{th} Five Year Plans, ICTs have been clearly recognized as a strong enabler to contribute to Bhutan’s economic development. To support ICT development, Bhutan’s “iDzodrak (2016–2020)” programme was developed to identify specific projects that could attract investments to contribute to the nation’s ICT infrastructure and encourage people to use digital services.\textsuperscript{179} Most recently the RGoB has launched the flagship “Digital Drukyul” initiative to support the establishment of e-government services.\textsuperscript{180} Further, in view of providing e-commerce services, in 2019, the RGoB has also prepared the E-commerce Guidelines, which comprehensively outline legal obligations in many facets of e-commerce (such as the definition of e-commerce; data protection; product returns and dispute settlement).\textsuperscript{181}

\textsuperscript{177} Ibid.
\textsuperscript{179} Ibid.
• Bhutan has started to establish a gig economy in efforts to promote and catalyse the adoption of digital technologies among Bhutanese. A notable example of this development is the launch of “DrukRide” in 2020. This ride-sharing app has enabled Bhutanese to book taxis from Bhutan Taxi Association’s 7,000-strong taxi fleet. This app will allow for on-demand bookings between Dzongkhags; can guide taxis to come right to the doorsteps of customers; and fare payment can be done either in cash or online (through cards and Royal Monetary Authority payment gateways).

• To support the establishment of new start-ups in the country, a group started “iHub Bhutan”, a platform which offers services such as pre-incubation programmes, co-working spaces, and research and consultancies for budding entrepreneurs. A recent endeavour that iHub Bhutan helped establish is a food delivery service, which helped those in Thimphu order food remotely and has proved very timely during the lockdowns.

• Bhutan has also explored the integration of digital technologies to support Bhutanese exploring housing options. With support from the Loden Foundation, Housing.bt is the country’s first real estate management portal, which offers its users buying and selling channels, listing options and property management, among other services. This start-up has pitched at the 2016 Global Entrepreneurship Summit at Silicon Valley and in 2018 received additional financial support from the Jab-cho initiative of the Royal Monetary Authority and Yarkay Group Pvt Ltd.

9.4.2 E-commerce challenges

Due to the nascent stage of Bhutan’s e-commerce sector, there are many priority areas that must be addressed by the different stakeholders to ensure that the country can benefit from the opportunities that are afforded by e-commerce.

• While Bhutan has reflected on the importance of ICTs and e-commerce in its latest strategic policies and vision, there is no dedicated e-commerce strategy outlining the concrete steps to be taken to establish this ecosystem. The E-commerce Guidelines launched by the RGoB in 2019 is a good premise to develop an e-commerce strategic document and ensure it fits in with the country’s overall national economic development agenda as well as be used as a document to attract foreign partners.

• As part of this assessment, UNIDO circulated an E-commerce Questionnaire to gauge the level of understanding of e-commerce among the Bhutanese community. This survey found that there is still a low level of trust in digital transactions, which mainly stems from the frequent Internet disruptions occurring due to discrepancies in the fibre-optics network. Consumers have responded to the survey stating that the biggest inconvenience in using e-commerce has been returning products, which can be a tedious process. They also highlight the high postage and insurance costs associated with deliveries, discouraging them from using e-commerce solutions.


185 UNIDO developed an e-commerce questionnaire to be disseminated to national stakeholders. As of 2 October 2020, only six respondents have participated in the survey.

186 Choden, Tshering (2020). Interview by UNIDO, UNIDO E-commerce Questionnaire, 2 September.

187 Wangmo, Kinga (2020). Interview by UNIDO, UNIDO E-commerce Questionnaire, 3 September.
As presented earlier, there is an ICT skills deficit in Bhutan, which is preventing a large segment of the Bhutanese population from taking advantage of digital solutions. This situation has largely been assigned to a misalignment in ICT skills and lack of industry-relevant skills, resulting in heavy reliance on foreign outsourcing. This is also compounded by the lack of industry certification of ICT courses and the use of traditional pedagogies.  

This barrier still persists as respondents of the UNIDO E-commerce Questionnaire noted that while many Bhutanese are aware of ICT technologies, they need proper guidance on how to use them properly depending on the context of application.

Access to finance for MSMEs represents a challenge for them to participate in digital and e-commerce platforms. Banks in Bhutan have a risk-averse approach and therefore do not offer credit only unless valid collateral (such as land and buildings) are available. There is also a high interest rate (12 percent) applied to loans and some financial institutions do not have the skills to accurately assess business plans. This barrier persists according to the respondents of the UNIDO’s E-commerce Questionnaire who also stated that increased dissemination of credit and debit cards and their validity on international platforms are required if e-commerce is to flourish.

Box 9.3: COVID-19 as an opportunity for Bhutan to build digital platforms

The initial response to COVID-19 by many businesses and consumers was stocking up medical supplies, household essentials and non-perishable food items. However, the concurrent enforcement of social distancing, lockdowns and other measures in response to the COVID-19 pandemic has led consumers across the globe to increase their online shopping activities. In response to this new demand, several brick-and-mortar businesses have shifted their operations and resources to e-commerce and digital platforms.

While many enterprises have not requested support for increased access to digital solutions and channels digitalization from the RGoB, the Bhutan Chamber of Commerce and Industry (BCCI) has increasingly been communicating to its members the necessity for enterprises with access to technology to explore moving to virtual operations if possible. The BCCI has also been exploring how it can set an example for other enterprises to follow, such as conducting business-to-business workshops, which would normally occur through country visits, digitally through conferencing platforms such as Zoom and Webex.

This example clearly shows that Bhutan is still at the early stages of its digitalization journey. But, by analysing and replicating successful digital practices in other countries, Bhutan can engage with the international community to determine the necessary projects to fast-track its transformation. A proven digital enabler is the development of digital platforms, which can encourage Bhutanese to become digitally perceptive and proficient. The development of these platforms have had positive spillover effects, including catalyzing IT infrastructure deployment; promoting e-payment gateways; employing technologies to expand logistical capacities; and fostering new local and international collaborative opportunities.

The COVID-19 pandemic has shown the world the necessity of digital platforms to sustain economic and social activity during the crisis as well as a future where digital solutions will drive development agendas in the future. Building upon their testimony in Box 9.2, the Bhutanese Association of Women Entrepreneurs has strongly recommended that the RGoB and international development partners collaborate to establish a national e-commerce platform that is dedicated to strengthening connections (digital, trade, logistical and communal) between urban and rural areas. This idea has strong support from other stakeholders who were interviewed during the consultation meetings and can be an output of the country’s forthcoming 21st Century Economy Roadmap.

Source: WTO 2020; Dorji 2020.

189 Ibid.
190 Wangmo, Kinga (2020). Interview by UNIDO, UNIDO E-commerce Questionnaire, 3 September.
9.4.3 Progress since 2016 e-Trade Readiness Assessment

UNCTAD’s 2016 e-Trade Readiness Assessment (eTRA) for Bhutan provided recommendations to support the country to use e-commerce as a driver for economic and social development. Box 9.4 below takes stock of the progress Bhutan has made concerning the implementation of key recommendations provided in its e-Trade Readiness Assessment.

Box 9.4: Bhutan’s progress on UNCTAD’s eTRA 2016 recommendations

<table>
<thead>
<tr>
<th>UNCTAD’s 2016 eTRA recommendation</th>
<th>Progress as of September 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development of a national e-commerce strategy, aligned with the ICT Roadmap and BICMA Act as well as support for e-commerce law drafting</td>
<td>The Ministry of Economy and Finance (MEF) has prepared a final draft of the national e-commerce strategy and corresponding laws, which are to be presented and adopted by Parliament. It is important to note that ICT-related provisions are prepared in line with other ICT master plan and development strategies.</td>
</tr>
<tr>
<td>Carry out a data centre investment attractiveness assessment for ICT Infrastructure as well as services</td>
<td>The Thimphu TechPark has established two data centres and Bhutan Telecom is currently in the process of developing data centres in select regions of the country.</td>
</tr>
<tr>
<td>Raise the profile of the “Brand Bhutan ICT Sector”</td>
<td>No progress on this recommendation. However, Thimphu TechPark is attracting investors from Bangladesh and Australia to support digital development. The ICT Industrial Development Plan has been prepared to boost deployment of ICT infrastructure in the country.</td>
</tr>
<tr>
<td>Support Bhutan Post “last-mile” address localization projects outside Thimphu.</td>
<td>Every district has been connected to the government’s logistics network. Last-mile connectivity (including telecommunication service providers) is present. However, there is still a strong digital divide between rural and urban communities in terms of technology and their leveraging potential.</td>
</tr>
<tr>
<td>Implement national e-payment gateway and support rollout with merchants. Develop e-money training programmes for e-money providers</td>
<td>Bhutan has started to engage in e-payments and mobile payments. The Bank of Bhutan is leading the way. However, technology reliability is weak and access to credit cards is low and only applicable in domestic scenarios (there are no provision for international transactions). Bhutanese banks are collaborating with Mastercard to address international transaction barriers.</td>
</tr>
<tr>
<td>Enhance existing job portal with mobile application. The job portal is a central repository of employers and jobseekers that provides timely information on skills requirement and numbers.</td>
<td>The job portal that is managed by the Ministry of Labour is accessible through the Ministry’s website and is meant to support employed youth to explore the national job vacancy repository – which has been kept updated. Unfortunately, this portal is not applicable to employed individuals and there are no private sector job portals as alternatives.</td>
</tr>
<tr>
<td>Explore alternate funding models such as the PPP (Public–Private Partnership) funding model or subscription models for applicable ICT projects.</td>
<td>There have been recommendations by the CEO and operators of Thimphu TechPark to work together with the RGoB to expand the TechPark through PPPs.</td>
</tr>
</tbody>
</table>

9.4.4 E-commerce opportunities and recommendations

Bhutan has made positive strides in developing its national e-commerce ecosystem. However, the country has not fully tapped into the potential of e-commerce. The recommendations presented below have been suggested to assist Bhutan strengthen its e-commerce capabilities by building upon the foundations that have already been built by the RGoB:

1. National e-commerce awareness campaigns: During national consultations, it was noted that many Bhutanese still do not grasp the concept of e-commerce or are aware that such services exist in Bhutan. Therefore, it is strongly recommended that the RGoB develop comprehensive e-commerce awareness campaigns to be delivered through existing communication channels to inform communities on the various facets of
e-commerce (policies, stakeholders, digital payments, etc.) as well as how they can utilize existing e-commerce services. These campaigns should also provide information on how the national focal points for businesses and individuals can get more information on e-commerce services. The objective of these campaigns must be to promote trust among the community in e-commerce platforms as well as digital solutions. RGoB representatives and e-commerce stakeholders could engage with regional e-commerce stakeholders such as Flipkart, Amazon India, Myntra, Daraz, Chaldal, Tmall, JD and KaoLa to learn how national e-commerce awareness campaigns are to be developed and implemented.

2. Increased access to credit cards and digital payment solutions: Banks in Bhutan have been issuing credit cards to its citizens to promote adoption of digital finance. However, many people still find it difficult to obtain a credit card. Interviews have shown that citizens that have access to credit cards do not use them on national e-commerce platforms because of the low credit limits and because they prefer to pay cash on delivery. Hence, it is strongly suggested that banks inform communities of the requirements to obtain a credit card. Further, the conditions to obtain these cards should also be reviewed thoroughly to identify areas where increased adoption can be promoted. The banks should also consider increasing credit limits to attract existing card holders to use this facility. Further, banks may wish to consider exploring partnerships with major credit card companies (such as Visa and Mastercard) to increase card transactions. The Bank of Bhutan recently launched its digital/mobile payment app to promote cashless transactions. To build upon this initiative, the concept of other successful digital payment solutions such as Alipay, PayTm, Rupay, WeChat Pay and MPesa should be explored.

3. Provision of core ICT equipment and essential skills development programme: In Bhutan, many primary and secondary schools do not have access to core IT equipment such as computers and tablets. Hence, the RGoB must prioritize the development of schemes and incentives to equip these institutions with these technologies at the national level. In addition, while Bhutan has initiated relevant ICT courses across all grade and education levels, it has been observed that trainers are not well qualified and/or lack different modalities to teach is contents. Hence, together with public and private stakeholders it would be recommended that an “ICT Train-the-Trainer Programme” be initiated to effectively train teachers on how to teach ICT skills (in line with existing courses). Further, the development of online and mobile essential ICT training courses would provide students with different avenues for learning. As a starting idea, Bhutan can explore initiatives that invite ICT professionals from China, India and/or Bangladesh to train Bhutanese professionals in the essential ICT skills that can be transmitted and communicated to youth. This will hopefully result in a domino effect to increase ICT literacy and awareness across all levels of society.

4. Scale-up start-up e-commerce platforms: There are several start-ups that have launched digital platforms to encourage Bhutanese communities to “go digital.” However, there is still a low adoption and utilization rate among communities. Hence, it is recommended that the government undertake a detailed analysis of popular start-ups to determine the requirements for them to scale up their activities to promote digitalization, if provided access to the appropriate resources. It would be very beneficial to invite regional and/or international e-commerce platforms to contribute to this analysis, as it would offer an opportunity to explore how they can collaborate to support scaling-up activities and address major challenges such as logistics in Bhutan.

5. Development of e-commerce and e-procurement platforms for a pilot Community Centre network: In Bhutan’s DTIS 2012 Chapter X, it was made very evident that Community Centres will play a crucial role in supporting the country’s digitalization transformation. The DTIS 2012 recommended that e-commerce and e-procurement platforms be established in each Community Centre to spur the use of digital platforms for trade and essential government
services. However, during national consultations it was found that while each Gewog has a Community Centre established, not all of them are capable of going digital because of the different levels of access to essential IT Infrastructure. Therefore, to kick-start the implementation of this recommendation from 2012, it is suggested Community Centres that are “digitally ready” be identified and be clustered into a network. This can be used as a pilot project for the development of a dedicated e-commerce and e-procurement platform. This proposed small-scale approach will facilitate the funds mobilization required for associated infrastructure and platform development. Furthermore, the corresponding skills development programme can be implemented in a targeted manner. The results and lessons from this project will enable the RGoB to identify the appropriate approaches to scale up and replicate this model across all other Community Centres in the country.
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### Annex: Members of the National Steering Committee

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dasho Karma Tshering</td>
<td>Ministry of Economic Affairs (MoEA)</td>
<td>Secretary/NSC Chairman</td>
</tr>
<tr>
<td>Mr Sonam Tenzin</td>
<td>Department of Trade, MoEA</td>
<td>Director General/EIF Focal Point</td>
</tr>
<tr>
<td>Mr Loknath Chapagai</td>
<td>Department of Industry, MoEA</td>
<td>Specialist</td>
</tr>
<tr>
<td>Mr Choki Gyaltshen</td>
<td>Department of Revenue and Custom, Ministry of Finance (MoF)</td>
<td>Commissioner</td>
</tr>
<tr>
<td>Mr Tandin Wangchuk</td>
<td>United Nations Development Programme (UNDP)</td>
<td>Economist</td>
</tr>
<tr>
<td>Mr Deo Raj Ghalley</td>
<td>Royal Monetary Authority of Bhutan (RMA)</td>
<td>Chief Research Officer</td>
</tr>
<tr>
<td>Mr Yeshi Dorji</td>
<td>Bhutan Chamber of Commerce and Industry (BCCI)</td>
<td>Head, Research and Planning Division</td>
</tr>
<tr>
<td>Mr Tempa Tshering</td>
<td>Department of Intellectual Property, MoEA</td>
<td>Chief IP Officer</td>
</tr>
<tr>
<td>Mr Sonam Chedup</td>
<td>Ministry of Economic Affairs</td>
<td>Chief IT Officer</td>
</tr>
<tr>
<td>Mr Jamyang Phuntsho</td>
<td>Bhutan Agriculture and Food Regulatory Authority, Ministry of Agriculture and Forests (MoAF)</td>
<td>Chief</td>
</tr>
<tr>
<td>Mrs Bhagyi Maya Dulal</td>
<td>Directorate Services, Ministry of Economic Affairs</td>
<td>Chief Finance Officer</td>
</tr>
<tr>
<td>Mrs Tshering Dem</td>
<td>Department of Cottage and Small Industry (DCSI), MoEA</td>
<td>Chief Industries Officer</td>
</tr>
<tr>
<td>Mr Sonam Tashi</td>
<td>Policy and Planning Division, MoEA</td>
<td>Chief Planning Officer</td>
</tr>
<tr>
<td>Mr Tashi Tenzin</td>
<td>Bhutan Standards Bureau (BCB)</td>
<td>Programme Officer</td>
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CONSOLIDATED ACTION MATRIX AND POTENTIAL SOURCES OF FUNDING
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10.1 Introduction

This study is undertaken in compliance with the terms of reference (ToR) “for developing and populating the Action Matrix of the Bhutan Trade Strategy Update 2020,” as part of the Diagnostic Trade Integration Study Update (DTISU) 2020. Among other things, the ToR entails constructing “a narrative related to ongoing, planned and potential sources of financing” to implement the identified measures in DTISU 2020. Initially, two matrices were proposed: one, with the list of recommendations from the nine chapters, and a second, identifying potential sources of financing that can be tapped for implementation. These have been merged into the Consolidated Action Matrix (CAM) for DTISU 2020.

This study has six sections, including this introduction (Section 10.1). Section 10.2 reviews the progress of implementation of the Diagnostic Trade Integration Study (DTIS) 2012, highlights those activities where significant progress has been demonstrated and other action items that have been left behind. The reasons for the modest level of progress for the latter are provided. The 11th and 12th Five Year Plans (FYPs) serve as the bases for the review, informed and substantiated by interviews and consultations with stakeholders and additional documents provided.

Section 10.3 details the proposed measures for implementation from 2021 onwards, short-term (2021–2023) and medium- to long-term from 2024 to 2028 as well as the budgetary requirements for implementing the measures. As the number of recommended measures are many, an attempt has been made to identify priorities for implementation.

In Section 10.4, financing issues are discussed including the effect of Bhutan’s graduation from the least developed countries (LDC) category in 2023. The 12th FYP recognizes this important milestone in Bhutan’s development path but it falls short of strategizing a clear path for resource mobilization during the successive five-year plans. Nonetheless, possible external and internal sources of funding are proposed. The importance of mobilization of domestic resources for the implementation of DTISU 2020 is emphasized while counting on external funding as available.

The success of DTISU 2020 will be measured by its effective follow-up, monitoring and evaluation covered in Section 10.5. As this aspect had not been sufficiently considered in the report, the diligent follow-up of the recommendations made herein can help to achieve better results.

Finally, Section 10.6 draws some general conclusions.

10.2 Status of DTIS 2012 implementation

The completion of DTIS 2012 was a landmark for the trade sector in Bhutan as the Department of Trade (DoT) had, for the first time, created a comprehensive framework for trade promotion and development. The time was also propitious in the sense that the 11th FYP (2013–2018) was due to commence the following year, wherein both the Ministry of Economic Affairs (MoEA) and DoT would identify projects for implementation during the period. The DTIS 2012 also reflected a conscious effort towards mainstreaming trade in the development agenda that was long overdue.
Accordingly, a wide range of activities was implemented during the 11th FYP, including those with Enhanced Integrated Framework (EIF) financing under Tier 1: Capacity-building activities and Tier 2: Investment-related projects, aimed at export diversification and growth. Worthwhile to mention are the following:

- A project on the Trade Information Portal (TIP) to provide comprehensive information to the trading community. This includes the establishment of a trade library as a reference point on trade-related documents.
- Development of the Bhutan Seal and Brand Bhutan.
- Enhanced application of information and communications technology (ICT) in the delivery of services within the MoEA.
- Capacity and institutional development of the EIF focal points in the DoT and organizations involved in trade.
- Construction of Mini-Dryport in Phuntsholing, and construction of dryport in Pasakha started in 2020.
- Construction of the Exhibition Centre under the MoEA.

Various measures were also undertaken to improve bilateral and regional trade: Trade Agreements with Bangladesh and India have been renewed, and a Memorandum of Understanding (MoU) with Bangladesh on the use of its inland waterways trade and an economic cooperation framework agreement with Thailand were signed. Moreover, the exploration of an alternative sea route for Bhutan’s international trade through the Chittagong and Mongla seaports in Bangladesh was concluded in September 2020 and the Preferential Trade Agreement (PTA) has been finalized and signed.

However, negotiations on a bilateral trade agreement with Nepal that commenced in 2010 remain inconclusive. The 11th FYP’s objective to almost double the number of export products from 14 to 27 could not be fully materialized. The Trade Development Act has not been enacted and the plan to offer skills development training for women entrepreneurs has left much to be desired.

10.2.1 Implemented activities

It is difficult to assess the success of DTIS 2012 properly as no holistic review of the recommendations listed in the Action Matrix (AM) has been undertaken; nor has the DTIS 2012 put forward a mechanism to carry this out. In this regard, only limited ad hoc assessments have been done by the National Implementation Unit (NIU), usually for particular purposes: i.e. planning for the DTIS Update 2020 and briefing senior officials or development partners. With some exceptions, the focus has been on activities that have been implemented.

A brief account on the status of implementation of DTIS 2012 is provided in this section. This is more akin to an exercise of tracking progress than an evaluation. Some 201 measures were proposed in the DTIS 2012 under six headings: (1) Macro-economic Policies, (2) Private Sector Development, (3) Trade and Investment Policies and Institutions, (4) Trade Facilitation and Logistics, (5) Standards and Quality Infrastructure, and (6) Sectors and Sub-sectors with Export Potential. These measures, associated priority ranking (very high, high, medium and low) and assessed percentage scores vis-a-vis overall implementation are detailed in the Annex.

There were 23 measures considered very high priority, 103 high priority, 64 medium priority, and 11 low priority measures. The progress rate is calculated based on available information on the status of implementation, including ongoing related initiatives. Although the percentage comes to about 35 percent, 5 percentage points have been added to compensate for any
information that might have been missed out during the review exercise. In other words, success of the implementation of the DTIS 2012 Action Matrix is rated at 40 percent.

The 11th FYP (2013–2018) was the logical development plan for DTIS 2012 proposals to be included for implementation. Sixteen National Key Result Areas (NKRAs) were adopted in the 11th FYP, two of which were specifically relevant to DTIS 2012: NKRA 1 on Sustainable Economic Growth, which aimed at export growth, and NKRA 6 on the Promotion of Arts and Crafts for Sustainable Livelihood, focused on development of cultural industries, many of which will be cottage, small and medium industry (CSMI), an area that DTIS 2012 emphasized. A few activities, such as the promotion of relevance and improving the quality of TVET, were aligned with other NKRAs.

A brief description of the progress follows, focusing on some of activities that were marked as very high and high priorities. The assessment follows the objectives and recommended actions in the DTIS 2012 Action Matrix.

(i) Macro-economic policies – In 2013, the MoEA proposed the exchange rate policy to be more supportive of trade and industrial development. The existing exchange rate arrangement is an important policy anchor for the country’s overall macroeconomic stability. A comprehensive review of macroeconomic policy may be undertaken in light of the emerging economic situation and Bhutan’s comparative advantages.

(ii) Private sector development – Some progress have been made in “creating an enabling institutional framework for SMEs” (strengthening the institutional framework for small and medium-sized enterprises (SMEs), creating a legal and institutional framework for business infrastructure and providing incentives to manufacturing firms):
   a. The Department of Cottage and Small Industry (DCSI) and the Ministry of Labour and Human Resources (MoLHR) implemented entrepreneurship development programmes within the frameworks of the CSI Policy 2012 and the National Entrepreneurship Strategy 2015, respectively.
   b. The CSI Policy 2012 was revised in 2019.
   c. The Business Opportunity and Information Centre (BoIC) was set up in 2013 as an autonomous body and converted into the Rural Enterprise Development Corporation Ltd. (REDCL) in 2016.
   d. The Economic Development Policy (EDP) 2010 was revised in 2016.
   e. The Ministry of Finance introduced the Fiscal Incentives Act of Bhutan in 2017 to foster private sector development including cottage and small industry (CSI).
   f. The Royal Monetary Authority (RMA) established the Microloan Regulation 2014, the Priority Sector Lending Guidelines in 2017 and the Rules and Regulations for CSI Bank in 2018. As a result, lending has increased substantially to CSMIs, including through four licensed microfinance institutions.
   g. The RMA revised the Foreign Exchange Rules and Regulations in 2018.
   h. The DCSI introduced the Guidelines on Rural Industry Development Scheme in 2017.
   i. With the closure of the Rural Enterprise Development Corporation Ltd., the National CSI Development Bank Ltd. was licensed in 2019.
   j. An Economic Stimulus Plan was introduced during the 11th FYP period to accelerate economic growth and development.
(iii) Trade and investment policies and institutions – Only marginal implementation has taken place in “fostering export promotion” (product identification, branding, One Gewog One Product (OGOP), etc.), “strengthening EIF structure” (EIF focal point, EIF national steering committee (NSC) and capacity-building), and “strengthening bilateral, regional and multilateral trade arrangements” (capacity-building and awareness and availing of technical assistance from the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the United Nations Conference on Trade and Development (UNCTAD), the International Trade Centre (ITC), and the European Union). However, the extent and pace of product identification and development have increased in recent years. For example, the Department of Trade has identified 18 products for branding while 16 products have been selected for implementation under the CSI Flagship Programme by the DCSI, Department of Agriculture and Marketing Cooperatives (DAMC), Bhutan Agriculture and Food Regulatory Authority (BAFRA), Department of Employment and Human Resources (DoEHR), Bhutan Standards Bureau (BSB) and Agency for the Promotion of Indigenous Crafts (APIC) for the period 2019–2023.

(iv) Trade facilitation and logistics – Two out of four objectives were pursued to some extent: “boost dry port operation and identify bottlenecks in clearance process” (measure clearance time for exports and imports at the Phuentsholing border) and “ensure modern and efficient clearance process based on automated system and risk management” (automated trade clearance system and risk management). A mini dry port started operations in Phuentsholing in December 2019 and the construction of dry ports in Pasakha and Gelephu was scheduled to commence in 2020. The electronic Customs Management System (eCMS) is currently under development.

(v) Standards and quality infrastructure – Three out of five objectives were met to a modest level. These are “developing national capacity on handling bio-security risks” (professional and equipment), “strengthen analytical capabilities for food safety” (scientific staff in the National Food Testing Laboratory (NFTL)), and “strengthen SMTQ [Standards, Metrology, Testing and Quality]” (institutional development of BSB including upgrading its laboratory and training of professionals). The Biosafety Act was passed in 2015.

(vi) Sectors and sub-sectors with export potential – Of the three objectives—manufacturing, services and agriculture—partial implementation was undertaken for recommendations for the first two.

a. For manufacturing, improvement of the road connection from Pasakha to the Indian railway head has been implemented under the Asian Development Bank (ADB) sub-regional project in South Asia.

b. In agriculture, a programme on farm roads construction was implemented to link farm products to markets. Activities to increase production of horticultural and organic products were carried out, although benefits remained modest due to crop diseases (Huanglongbing (HLB)/citrus greening, citrus fruit fly, powdery mildew, cardamom disease) and a lack of logistic networks in marketing. The progress on certifying and branding organic products for exports was sluggish at best. Efforts to strengthen food testing facilities and develop food safety measures were fruitful despite shortfalls in developing linkages with Bhutan’s trading partners on standards and mutual recognition of certificates. Limited testing of diseases through tissue culture on crops and production and distribution of disease-free grafted seedlings of horticultural crops to farmers were also carried out.

(vii) Services – Reasonable progress has been achieved specifically on measuring tourism earnings, promoting deeper understanding of sustainable tourism among the Royal Government of Bhutan (RGoB) and line agencies, and developing new tourism products,
experiences and destinations. Tailor-made training programmes for senior officials have not been developed nor conducted.

(viii) ICT – Fibre optics, broadband, Internet connectivity and an ICT ecosystem including e-Commerce, e-Procurement, the Thimphu TechPark/BITC, and a legal and policy environment to enable e-Commerce and ICT-enabled business were activities accomplished under the ICT category. The 12th FYP Flagship Programmes on Tourism and ICT (Digital Drukyul) are anticipated to generate substantial progress in these areas.

10.2.2 Remaining activities

A number of activities remain unimplemented. Under “macro-economic policies”, these include: seeking “a better match between needs of economy and labour market” (weighing the pros and cons of selective immigration to meet the labour shortage, training needs assessments and analysing rural–urban migration) and improving the quality and homogeneity of statistical data on trade and FDI. No assessment has been made on the nature and extent of informal trade in the country.

Although much has been done in employment promotion, the efforts to match the needs of the economy with the supply of labour leaves much to be desired. The paradox of unemployment and labour shortage in the economy continues with little sign of improvement.

Under “private sector development”, unimplemented activities fall under “entrepreneurship development” (building a class of entrepreneurs for SMEs promotion), “setting up consultative services” to help SMEs in improving their product quality, and “promote development of value chains” (a taskforce on SMEs linkages and supporting enterprise-led solutions). The 12th FYP provides more focus on developing a class of entrepreneurs to support and advance SMEs.

Under “trade and investment policies and institutions”, not much headway was achieved in the following areas: “increase of FDI” (investment policy review, investment promotion strategy, assessment on the need to ratify international investment and dispute settlement treaties), “strengthen EIF structure (organize/facilitate monitoring and evaluation (M&E) of the EIF programme, arrange a donor facilitator, and mainstream trade into national development policy), and “mainstreaming trade into development” (all action points), and “strengthening bilateral, regional and multilateral trade arrangements” (finalize bilateral trade agreement with Nepal, foster private sector cooperation with Thailand, greater use of the Generalized System of Preferences (GSP) and Everything But Arms (EBA), and accession to the World Trade Organization (WTO)).

Under “standards and quality infrastructure”, the objective “to develop national capacity of BAFRA to certify organic products” (accreditation and engagement of international expert) did not fully materialize but efforts are ongoing.

Under “sectors and sub-sectors with export potential”, the recommended internationally certified laboratory for product testing for manufacturing has not been established. No concrete measure is discernible to reduce pollution from mines and industries, nor on the linkage between mineral extraction and processing into chemical products. A study on identification of high-value energy-intensive industries remains to be implemented. On sustainable tourism, the proposed strategy to reduce carbon footprint has not been taken up. On ICT-related measures, little to no progress has been made on documenting and raising Bhutan’s profile as an Information Technology enabled Services (ITeS) destination and consequently, increasing FDI in the ITeS sector.
10.2.3 Factors hindering implementation

The major factor that hindered successful implementation of the DTIS 2012 AM is the lack of coordinated effort to mainstream trade in the 11th FYP development programme. In as much as DTIS 2012 was a multisectoral approach to integrate trade in the development agenda, most recommendations were not incorporated in the 11th FYP as the projects indicated within were identified and developed by individual agencies with their respective sectoral interests. In other words, many activities proposed under DTIS 2012 AM did not find place in the 11th FYP. Whatever progress has been made is not due to the DTIS 2012 AM, but more because the proposed activities were in line with the sectoral priorities reflected in the 11th FYP. In this regard, the DTIS 2012 fell short of satisfactorily achieving the purpose for which it was intended. To the extent that trade is integrated into the development process between 2012 and 2020, accomplishments and efforts may be rated as modest at best.

Other factors that hampered implementation are (1) too many activities proposed for implementation, (2) the absence of a clear monitoring and follow-up mechanism, (3) inadequate intra-agency and interagency coordination, (4) weak institutional capacity including change of personnel in the NIU, (5) shifting development priorities, and (6) lack of financial and human resources. All of these elements have found some place in the review of the DTIS 2012 AM here or in various chapters under DTISU 2020. The lack of financial and human resources cannot, however, be seen as one of the main reasons for inhibiting greater progress.

10.3 Plan of action for DTISU 2020

Each of the nine chapters include projects that can be implemented in the short-term (i.e. within the 12th FYP period), those that can start within the 12th FYP but can extend beyond the scope of the plan, and others that can be pursued later. The later two sets of projects have been grouped together to be implemented in the medium to long-term period, between 2024 and 2030. Table 10.1 below provides a summary including the cost estimates of projects under each chapter, while the list of projects that have been recommended for implementation under DTISU 2020 are appended at the end of this chapter.

Table 10.1: Summary of recommended projects, DTISU 2020

<table>
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<tr>
<th>Chapter</th>
<th>No. of projects</th>
<th>Est. project cost (USD mil)</th>
<th>Est. project cost (BTN mil)</th>
<th>Short-term or medium/long-term</th>
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<td>3</td>
<td>0.20</td>
<td>30.00</td>
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<td>2</td>
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<td>7.47</td>
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<td>3</td>
<td>9</td>
<td>5.75</td>
<td>431.25</td>
<td>5 ST, 4 MLT</td>
<td>A2, B5, C1, D1</td>
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<tr>
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<td>14</td>
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<td>290.25</td>
<td>8 ST, 6 MLT</td>
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<td>5</td>
<td>15</td>
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<td>402.00</td>
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<td>6</td>
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<td>7</td>
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<td>8</td>
<td>21</td>
<td>10.70</td>
<td>802.50</td>
<td>17 ST, 4 MLT</td>
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<td>9</td>
<td>13</td>
<td>10.74</td>
<td>805.50</td>
<td>11 ST, 2 MLT</td>
<td>A5, B3, C2, D3</td>
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<tr>
<td>Total</td>
<td>98</td>
<td>44.75</td>
<td>3,371.25</td>
<td>60 ST, 38 MLT</td>
<td>A33, B29, C26, D10</td>
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</table>

Source: ISCO-08, Volume-1, ILO and Annual Report 2018–2019, MoLHR.
Figure 10.1 above shows the total number of projects, broken down for short-, medium- and long-term implementation, and classified under four themes: (i) making policy decisions/reforms, (ii) improving business climate, (iii) human and institutional capacity-building; and (iv) investment-oriented projects. The estimated budget in US dollars and Bhutanese Ngultrum is also indicated. The projects and themes are briefly discussed below while the budget and time-frame will be covered subsequently in the relevant sections. The same information is also projected in Figure 10.2 below.

There are 98 projects, of which 60 may be implemented in the short-term and 38 initiatives for the medium- to long-term, translating to an average of 11 projects per chapter. Sixty-one percent of the projects are planned for implementation for the period 2021–2023, while the rest (39 percent) are to be taken up in subsequent years. Availability of funds, the RGoB’s priorities and internal capacity for implementation will determine the commencement of the projects regardless of the set time-frame.

Given the importance accorded by the RGoB to economic diversification and export promotion as well as addressing the impacts of COVID-19 pandemic on multiple economic sectors, the majority of the projects are meant for implementation in the short-run. The projects slated for implementation in the medium- to long-term period are, by no means secondary, as these will be critical in meeting the overall objectives of DTISU 2020.

The number of recommendations range from 3 in Chapter 1 dealing with policy issues to 21 in Chapter 8 on tourism services. The numbers are naturally derived from the analyses in each chapter, taking into account measures that are needed to improve and enhance performance under each chapter. Chapter 2 focuses on skills development crucial for increased production, manufacturing and exports while Chapter 3 deals with trade facilitation, an important component in building competitiveness for exports. Chapter 4 takes a close look at the state of CSIs and entrepreneurial culture as well as challenges facing a sector that is globally known for trade and employment creation. Chapter 5, in a way, is an extension of Chapter 3. It highlights the need for modern trade infrastructure like product testing, quality control and certification services for exporters. Together with Chapters 1 and 4, Chapters 6 and 7 on export and investment promotion and export diversification, respectively, form the main body of the DTISU 2020 study. As tourism is vital for Bhutan’s economic growth, Chapter
8 looks at how this sector can be leveraged in the period after COVID-19. Finally, Chapter 9 delves into digitalization and e-Commerce that can facilitate trade and a range of other IT services in improving efficiency in communication and adding value to business enterprises.

Projects have been classified under four themes as shown in Figure 10.2 below. Projects about policy decisions or reforms number the highest at 33, followed by those about improving business climate and facilitation at 29, about human and institutional capacity development at 26 and about making investments at 10. This is indicative of the constraints existing at different sectors and levels in the economy that have to be eased or removed to achieve greater efficiency in commerce and trade. These bottlenecks can easily be tackled, given Bhutan’s desire to improve its position in the Ease of Doing Business ranking and spur the growth of the private sector. The chapters provide justifications for implementing these measures.

The total estimated cost of all projects is US$44.75 million or BTN 3,371.25 million. The amount is modest, given the comprehensive programme of action proposed under DTISU 2020 to upscale the performance of CSMLs, trade and the tourism sector during the decade. Many projects can be financed by the RGoB’s existing financing mechanisms, such as the 12th FYP and its Flagship Programmes. For projects under Chapters 1, 6 and 7, the amounts needed are quite small and can be easily adjusted. Other projects may be chosen by or implemented in cooperation with development partners, most of whom are already engaged in supporting the areas covered in DTISU 2020. For the rest, the MoEA, as the national lead agency (NLA), the Ministry of Finance (MoF), and the Gross National Happiness Commission (GNHC) can find ways to mobilize the needed funds from Bhutan’s development partners or through a recourse to national sources, as indicated later in this chapter.

After the acceptance of the DTISU 2020 report by the stakeholders and the RGoB, the MoEA as the NLA, should consult with the relevant organizations for the financing and implementation of the recommended projects. Each chapter prioritizes short-run actions over those that will be undertaken in the long run. The priorities may have to be adjusted at the time of implementation as the projects also need to adapt to changing circumstances. Resource mobilization will be an integral part of the task of the lead agency.
10.3.1 Short-term measures

Figure 10.1 above (right) shows that there are 60 projects for implementation in the short-term with a total estimated budget of US$12.19 million (BTN 914.25 million). This comes to 20 projects for 9 chapters per year between 2021 and 2023, or slightly over 2 projects per chapter a year on average. This is a realistic figure that can be implemented, especially as projects tend to spill over to subsequent years. The budget, at about US$4.06 million or BTN 304.75 million a year on average, is also reasonable, even with the constraints posed by the COVID-19 pandemic.

With a total number of 17, Chapter 8 has the highest number of projects, followed by Chapter 9 at 11; Chapter 6 has none. The projects in other chapters range from 3 to 8. Chapter 9 has the largest budget at US$4.89 million or BTN 366.75 million, followed by Chapter 5 at US$2.21 million or BTN 165.75 million.

In terms of the themes, there are 22 projects aimed at policy decisions or changes, 19 on improving the business climate, 13 on capacity-building, and 4 that are investment related. This is very much in line with the need to address a number of issues raised in the respective chapters in the short-term to stimulate economic diversification and export promotion.

More details can be seen in the Schedule.

10.3.2 Medium- to long-term measures

Upon completion of the 12th FYP, 38 projects are planned for implementation after 2023. The total estimated budget for these projects is US$32.26 million or BTN 2.42 billion. It is expected that most of these projects would be implemented under the 13th Five-Year Plan, starting July 2023 until June 2028. This means that, on average, only about seven projects need to be taken up every year during the 13th FYP. The required annual budget for these projects would amount to US$6.45 million or BTN 483.90 million during the 13th FYP period.

Compared to four projects for investment during the short-term period, six are identified for the medium to long-term. This accounts for the higher budget and anticipated longer period of implementation. Policy decision or change and capacity-building themes have 13 projects each and 10 projects are related to improving business climate.

Chapter 5, with 8 projects, has the highest projects for implementation in the medium to long-term. There are no projects in Chapter 1 for the same period. Other chapters have between two and six projects.

Due to the high number of recommendations, Chapter 8 has the highest budget in the medium to long-term period at US$8.94 million or BTN 670.50 million, followed by US$7 million or BTN 525 million for projects in Chapter 2 and US$5.45 million or BTN 408.75 million for Chapter 3 projects. The chapters on tourism, skills development and trade facilitation continue to remain crucial in the 12th FYP regardless of the ongoing exercise on its reprioritization.

More details can be found in the Schedule below.
10.4 Approach to resource mobilization

The 12th FYP notes Bhutan’s impending graduation from the LDCs starting December 2023, with a three-year transition period until the end of 2026. The document does not expressly discuss the future implications of graduation on financial resources. It states that “as the 12th FYP will be Bhutan’s last FYP as an LDC, accelerated support of all development partners for the implementation of the 12th FYP will be crucial to ensure that graduation is sustainable and irreversible”. The document also places hope in the Round Table Meeting (RTM) with development partners to review progress of implementation and resource mobilization. It notes that the 14th RTM was held in mid-March 2019 with 50 participants representing Bhutan's bilateral and multilateral development partners.

The next RTM is due midway through the 12th FYP period. Hence, there is an implicit acknowledgement that support from development partners is essential, not only for the success of the 12th FYP but also to lay down a strong foundation for sustainable development in the future as Bhutan becomes a high-income country. The objective becomes even more challenging as the ongoing work on the 21st Century Economic Roadmap tentatively envisions Bhutan’s economy to be dynamic, prosperous and inclusive, with income generation, employment and productivity as the key measurable targets to be realized by 2030.

What is encouraging is the fact that 70 percent of the 12th FYP total budget outlay of BTN 310 billion (US$4.43 billion) will be internally sourced. This target would go up to 80 percent by the next FYP. The RG0B stated that it will explore “innovative and integrated financing mechanisms” to meet the resource gap of BTN 29.243 billion (US$418 million), including borrowings from national and multilateral financial institutions. In line with this statement of commitment and Bhutan’s impending graduation from the LDCs, the RG0B has increasingly relied on national funding sources to implement the DTISU 2020, even as it expects to continue receiving financial assistance from its development partners.

Table 10.2 below shows the actual and projected resource position, both internal and external, during the 12th FYP. Despite the sharp decline in the current fiscal year (FY), the resource position improves at the beginning of FY 2021–2022. The Constitution mandates that domestic resources have to meet recurrent expenditures; and over the past years, these have not only been met but have increasingly contributed to financing capital expenditures as well. For instance, 43 percent of capital expenditure was met from domestic resources in FY 2018–2019. The expectation is that the share of domestic resources to finance capital expenditure will grow over time as external grants decline.

Apart from graduation from the LDCs, the more important effect on resources will arise from the impacts of the COVID-19 pandemic. It was not possible to assess its full impact within six months of its onslaught although the Ministry of Finance projected that domestic resources will decline by 14 percent and GDP growth rate will decelerate to negative 2.1 percent (down from 1 percent estimated earlier in the year) in 2020. Sustainability will therefore become a major issue in the short- to medium-term given the uncertain nature of the pandemic.

Based on discussion with the members of the Task Force on the 21st Century Economic Roadmap on 1 July 2020. The goal of a high-income country is still being revisited by the Task Force considering the COVID-19 situation so the exact formulation might change in the final version.
Though the impact of the pandemic is felt across all sectors and segments of the population, those most affected are trade and industry, tourism, construction, and infrastructure development. While income from export earnings, taxes and revenue from tourism will sharply decrease, the slowdown in construction and infrastructure development will affect future growth, previously projected at 6.9 percent to 7 percent.

During this critical period, a few development partners have provided some financial relief. In light of the pandemic, the RGoB itself is reprioritizing the 12th FYP, which is anticipated to hamper implementation of development programmes and projects and consequently, the achievement of the 12th FYP targets. An Economic Contingency Plan (ECP) amounting to BTN 4 billion has been approved to revitalize the agriculture, construction and tourism sectors. Together with the creation of the National Relief Fund (NRF) of BTN 30 billion to address immediate needs arising from the pandemic, a number of fiscal and monetary measures have also been introduced. The need for financial resources requires innovative financing mechanisms and continued help from development partners.

The DTISU 2020 must relate to the ongoing review of the 12th FYP by the GNHC and the work of the Task Force on the 21st Century Economic Roadmap. GNHC sources show that in principle, the 12th FYP will remain, but implementation will depend on the availability of resources, specifically domestic resources, implying that some targets will not be met due to the effects of the COVID-19 pandemic. Projects that will be implemented with external funding (BTN 62 billion) will continue as planned.

Infrastructure projects such as construction (the Build Bhutan project, farm roads, greater mechanization), industrial estates and dry ports, and other capital-intensive projects to be financed by the RGoB will be kept on hold. For the remaining implementation period of the FYP, greater focus will be accorded to food security, especially import substitution, skills development and employment, health and education. The development of CSMIs, ICT and export promotion will not suffer. In other words, proposed measures under DTISU 2020 will largely fall in line with the current development strategy of the Government during and after the COVID-19 period. The Flagship Programme on Tourism, Business Startup and CSI, Digital Drukyul, Organic Agriculture and others will continue and linkages to the 12th FYP programmes detailed in the DTISU 2020 Consolidated Action Matrix will be maintained.

The 21st Century Economic Roadmap is expected to focus on agriculture, energy, education, manufacturing, tourism and ICT, although a proposal for a firm path is yet to emerge. Consequently, it has not been possible to link the DTISU 2020 recommendations to the strategies and programmes in the 21st Century Economic Roadmap at the time of writing this chapter. Should the above six identified priorities remain, DTISU 2020 will be relevant as the identified measures will broadly fall under four of the six priorities.

Table 10.2 Resource position, 2018–2023 (BTN million)

<table>
<thead>
<tr>
<th>Revenue/FY</th>
<th>FY18/19 (actual)</th>
<th>FY19/20 (actual)</th>
<th>FY20/21 (projected)</th>
<th>FY21/22 (projected)</th>
<th>FY22/23 (projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic resources</td>
<td>34,707.67</td>
<td>38,495.85</td>
<td>33,189.39</td>
<td>36,617.91</td>
<td>41,582.39</td>
</tr>
<tr>
<td>Other receipts</td>
<td>-3,190.86</td>
<td>507.80</td>
<td>489.83</td>
<td>292.58</td>
<td>250.78</td>
</tr>
<tr>
<td>External grants</td>
<td>10,516.49</td>
<td>13,722.97</td>
<td>20,142.85</td>
<td>12,636.77</td>
<td>6,164.78</td>
</tr>
<tr>
<td>Total resources</td>
<td>42,033.30</td>
<td>52,726.62</td>
<td>53,822.07</td>
<td>49,547.26</td>
<td>47,997.95</td>
</tr>
</tbody>
</table>

Source: Budget for FY 2020–2021, Department of National Budget, Ministry of Finance.
10.4.1 Internal sources

Table 10.2 above gives an indication of the amount of Bhutan’s domestic resources until the last fiscal year of the 12th FYP. Domestic revenues covered 64 percent of total expenditures in the 11th FYP, up from 60 percent in the 10th FYP. The increase is by no means large, yet persistent efforts in resource mobilization from internal sources is definitely paying off. This share is projected to increase to 80 percent by the end of the 12th FYP, which is an optimistic target. If it were not for the pandemic, the share could have gone up substantially, even if it may not reach the target.

For over three years, Bhutan has been making efforts to expand avenues for domestic resource mobilization, in preparation for its graduation from the LDCs. Some endowment funds like the Bhutan Trust Fund for Environment Conservation (BTFEC), Bhutan Health Trust Fund (BHTF), BIOFIN and Bhutan for Life have been meeting funding needs in their respective sectors. The establishment of the Bhutan Climate Fund to add to other financing mechanisms in the country has been proposed. By and large, however, these initiatives are specific, related to health, environment or climate change, and their relevance to DTISU 2020 will be marginal. At most, it can possibly affect the development of organic and herbal products for export. Efforts to find or create these and other similar mechanisms suitable for financing the implementation of DTISU 2020 must be exerted.

To support the RGoB in examining innovative finance solutions and opportunities, UNDP developed a discussion paper in December 2019. The paper defines the subject as “initiatives aiming to raise new funding (i.e., additionality) or optimize the use of traditional funding (i.e., effectiveness and results-oriented) for the SDGs” and considers as many as 17 possibilities out of the 24 that have been suggested for closer look by the Government. It is reported that some of these are already being implemented in one form or another. The recommended options, discussed at length in the referred document, are no longer described here due to space constraints.

The challenge, of course, is to decide which of these options, or other financing facilities, could best finance some of the projects proposed under DTISU 2020. Relevant stakeholders, like the Ministry of Finance, Ministry of Home and Cultural Affairs (MoHCA), Department of Information Technology and Telecom (DITT), Tourism Council of Bhutan (TCB), MoEA, MoAF, RMA and GNHC will have to be consulted on the matter.

The public-private partnership (PPP) model is fairly new in Bhutan, but it provides a platform for collaboration with the private sector to execute some projects, especially in trade promotion and CSMI development. As a large number of corporations exist in the country, they can augment their social responsibility by financing activities related to institutional and human capacity-building.

Bhutan has enough experience in floating of Treasury Bills for resource mobilization that can be applied. In September 2020, the RGoB floated public bonds worth BTN 3 billion to offset the revenue losses due to the COVID-19 pandemic. Apparently, the bonds were oversubscribed, indicating that the general public is willing to invest in secure investment instruments that are currently lacking in the country.


Under Techfin: Digital banking and financial literacy, crowdfunding, diaspora finance and e-lottery; Under responsible investing: Impact investing, registries and assessments, public guarantees for youth/CSIs, philanthropy, corporate social responsibility (CSR) and eco-tourism partnerships; Under outcome-based financing: Payment for Ecosystem Services (PES), alternative public service delivery by civil society organizations (CSOs) and PPP, and under smart taxes: Urban taxes and service fees, royalties and taxes on natural capital (forests) and pollution and health taxes
Given the points above, the best course would be to convene all stakeholders to explore how the recommendations under DTISU 2020 could be financed as soon as the study is approved. Leadership and initiative on this matter rests with the MoEA, NLA for implementation and monitoring of DTISU 2020 in cooperation with UNDP, the GNHC and the Ministry of Finance. If the next RTM can be held within the first half of 2021, it will offer an ideal opportunity for resource mobilization.

10.4.2 External sources

Like other LDCs, Bhutan has benefited significantly from financial and technical support from its development partners. For the 12th FYP, 20 percent of the outlay corresponding to BTN 62 billion is expected to be covered by external assistance. With graduation from the LDCs, Bhutan will not only lose the special consideration as an LDC for development aid but also any tariff concessions (duty-free treatment, GSP, EBA facility) that it enjoys in its exports to developed countries. In other words, there will be a double disadvantage, one arising from the anticipated decline in development aid, and the other, from the loss in export earnings.

Table 10.2 above shows an increasing trend in the total available resources until FY 2020-2021 and a reverse trend in the last two years of the 12th FYP. The decrease is more pronounced in external grants; this will be of particular concern to the RGoB. The ongoing COVID-19 pandemic will also have a significant negative impact on the availability of funds within the national treasury. However, the projections for the last two years of the 12th FYP are also likely to be conservative, given the lack of confirmation of available resources at the time of projection, the first quarter of 2020. The income from the hydropower sector has kept the economy going throughout the pandemic. Commissioning the Mangdechu hydropower project in 2019 and the expected completion of Punatsangchhu II by 2023, the last year of the 12th FYP should be noted. Loan repayment notwithstanding, a significant amount of funds will be available to the RGoB from the income generated by the two projects.

The resource situation, therefore, may not be alarming. Bhutan’s record of good governance and aid utilization, prudent budgetary and financial management practices, and prevailing goodwill from development partners will continue to have a positive effect on resource inflows despite Bhutan’s graduation from the LDCs. Second, a three-year transition period is available for domestic adjustments, such as tax reforms and economic and trade diversification, which are already built into the 12th FYP. Third, with the possible exception of the EU, Bhutan’s traditional bilateral development partners like India and Japan, will continue to support Bhutan because their objective of development cooperation is not entirely linked to its LDC status. Fourth, being an LDC is not a key criterion for financial assistance from the multilateral development banks like the ADB and the World Bank. Finally, there would be a decrease in Overseas Development Assistance under the UN system upon graduation. But here, too, the UN Committee on Development Planning has proposed the establishment of a “graduating support facility” for the LDCs which, when approved, can compensate for resource losses for a certain period of time. In this scenario, the strategy should be to utilize external support in critical economic sectors and cross-cutting issues for larger impact while simultaneously strengthening national resource generation and mobilization efforts.
Monitoring and evaluation (M&E) is an essential part of Bhutan’s FYPs. Monitoring is an integral part of programme and project implementation, with responsibility falling primarily on the organizations concerned and the involvement of the Policy and Planning Divisions (PPDs) of the ministries in particular. Yet, in the review of the Economic Development Policy (EDP) 2016, one of GNHC’s recommendations was to regularly monitor EDP performance. For this to happen, GNHC itself needs to develop a “more robust monitoring mechanism.”

Reviews of previous FYPs note that except in cases of donor-funded projects and programmes, evaluation is still to take a firm root in the national development system, be it at the central or local levels. For instance, the 10th FYP Mid-Term Review Report in June 2011 concluded that the “evaluation mechanism needs to be institutionalized across all sectors to assess and evaluate programmes at outcome and impact levels”. The National M&E System (NMES) was integrated with planning and implementation, budgeting and expenditure functions in the 11th FYP but could not be fully operationalized as the main planning and monitoring system (PlaMS) failed to take off. This was a key observation made by the Royal Audit Authority (RAA) in its review of the 11th FYP. Moreover, while silent on evaluation, the mid-term review of the 11th FYP in 2016 acknowledges that weakness in project monitoring had adversely affected the quality of infrastructure projects and their timely completion. It can thus be said that M&E of programmes and projects needs to be strengthened at all levels of government. The shortfall in M&E is being addressed to some extent from the perspective of the GNHC Secretariat as discussed in the next section, but such a realization has not necessarily dawned upon line ministries and organizations. This issue requires concerted efforts from the GNHC Secretariat in ensuring that periodic M&E is conducted as an integral part of the implementation of development programmes and projects.

10.5.1 National M&E structure

The 12th FYP underscores the need for active M&E during the period of each FYP and specifies responsibilities for it. Monitoring at the national level will be done by the GNHC, the line/lead agencies will monitor at the sectoral/national key result areas (NKRAs) level, and the Dzongkhags and Gewogs at the local level. For this purpose, KRAs will be translated into annual performance targets and key performance indicators (KPIs) at the central and local levels. Through the Government Performance Management Division (GPMD), the Prime Minister’s Office (PMO) will also monitor implementation on an annual basis using the Annual Performance Agreement (APA) system with government organizations. GPMD will serve as the agency tasked to review and evaluate annual performance and targets. The GNHC will continue to conduct the mid-term and final reviews of the FYP.

The UN Sustainable Development Partnership Framework for Bhutan (2019–2023) is geared to support the 12th FYP theme of “coordination, consolidation and cooperation (3Cs)” among all actors within the framework of “results-based planning.” This is a commitment to efficient implementation of programmes and projects as well as proper utilization of resources for which joint monitoring and evaluation will be carried out between the RGoB and the UN. A Country Programme Board, supported by the Result Groups, has been set up for this purpose with high-level representatives from both sides. Both the RGoB and UN system support the carrying out of regular M&E.


Ministry of Economic Affairs (MoEA)—Department of Trade (DoT), Department of Industry (DoI), Department of Cottage and Small Industry (DCSI), Department of Intellectual Property (DIP), Policy and Planning Division (PPD), Administration and Finance Division (AFD) and ICT Division—Royal Monetary Authority (RMA), Department of Revenue and Custom (DRC), Ministry of Finance (MoF), Ministry of Foreign Affairs (MFA), Tourism Council of Bhutan (TCB), Royal Securities Exchange of Bhutan (RSEB), Gross National Happiness Commission (GNHC), Bhutan Agriculture and Food Regulatory Authority (BAFRA), Bhutan Standards Bureau (BSB), the Department of Information Technology and Telecom (DITT), and UNDP.
A clear-cut provision for evaluation of the DTIS 2012 and EIF programme at the national level is surprisingly absent. The responsibility for implementation and monitoring, however, rests partly with the National Steering Committee (NSC) chaired by the Secretary, MoEA and comprised of representatives from other relevant organizations, including UNDP, as the development facilitator. Its other functions include mainstreaming trade in development programmes, coordination with relevant organizations within and outside the RGoB, and approving project proposals for submission to the EIF for approval of funding. The NSC meets as necessary, as a regular meeting is not specified in its Terms of Reference (ToR). It is supported by a focal person (Head of the Department of Trade) and a National Implementation Unit (NIU) within the Department.

The EIF project under the DoT was evaluated in 2017 as per the management requirements necessitate that projects supported by development partners are reviewed. The evaluation specific to this project was generally favourable, but no assessment of the implementation of the DTIS 2012 as a whole was undertaken. The evaluation report alludes to some weaknesses of the NSC when it recommended that each stakeholder should have been assigned specific recommendations in implementation rather than relying only on the Steering Committee. The NSC should also focus on mainstreaming trade in development programmes and forging better coordination with relevant organizations besides the approval of projects for seeking funds from the EIF.

The responsibilities for implementation of the DTIS 2012 was spread across a number of organizations: the Ministry of Economic Affairs (MoEA) branches, Tourism Council of Bhutan (TCB), Department of Revenue and Customs (DRC), Bhutan Agriculture and Food Regulatory Authority (BAFRA), Bhutan Standards Bureau (BSB), the Department of Information Technology and Telecom (DITT), among others. This required a strong coordination role within the MoEA, and the NSC was expected to play that role to a large extent. However, DTIS 2012 lacked proper ownership among the stakeholders and responsibility of coordination for systematic implementation and follow-up. This must be avoided for DTISU 2020. As the lead agency for NKRA 2 on the economic diversification programme under the 12th FYP, the MoEA should drive DTISU 2020. To that end, the National Steering Committee should be provided with this central role in addition to responsibilities in programme coordination, implementation, monitoring and evaluation.

10.5.2 M&E of DTISU 2020

Taking the above developments into account, more rigorous monitoring by the NSC is proposed for the implementation of the DTISU 2020, if the NSC is to be continued during its implementation. Such an exercise should extend beyond the EIF-funded projects and to the entirety of the proposed activities under the DTISU 2020. This should be linked with the RGoB monitoring framework (semi-annual, annual, mid-term and final) of the Five-Year Plans. This entails semi-annual and annual monitoring by the Policy and Planning Division, MoEA, and the GPMD, PMO, respectively. In both semi-annual and annual monitoring frameworks, the NSC should support the PPD and GPMD with preparation of documents and submission of clarifications, as necessary. A more active role of the NSC is envisaged in facilitating smooth implementation and monitoring of progress.

If the NSC ceases to exist on the completion of the ongoing EIF project this year, a committee comprised of representatives of all the stakeholders in the DTISU 2020 needs to be set up. Such a committee can be modeled along the lines of the Project Steering Committee (PSC) under the ongoing EU–Bhutan Trade Support Project, whose structure and responsibilities are clearly defined. The core PSC consists of six partners in the project including development partners. Nine associate partners have been identified from the private sector and CSOs, who
may attend the quarterly meeting and contribute to the implementation process. A National Coordinator, supported by a few staff, manages the PSC Secretariat. If this option is chosen, the current National Implementation Unit in the Department of Trade can take on the role of the National Coordinator. The NSC can be reconstituted as the DTISU 2020 Programme Steering Committee (PSC 2020) with fewer members to represent the main stakeholders in the DTISU 2020. A schematic diagram to reflect this arrangement is shown below in Figure 10.3.

Figure 10.3: Implementation arrangements for the DTISU 2020 Consolidated Action Matrix

Explanation of the figure above:

1. **Ministry of Economic Affairs**
   National Lead Agency (NLA)/DTISU 2020 and programme owner.

2. **Collaborators**
   These are the 11 major organizations that are involved in the implementation of the DTISU 2020 Programme: the MoLHR and the DRC, DITT, GNHC, BAFRA, BSB, DCSI, DoI, TCB and BCCI. The head of the organizations concerned will nominate their representatives.

3. **Programme Steering Committee 2020**
   Representatives of the collaborators in DTISU 2020 Programme implementation, coordination and monitoring. It would be chaired by the head of the Department of Trade which reports to the Secretary/Minister, as appropriate, on the progress of the DTISU 2020 Programme and obtains directives from them. They would also interact with their counterparts in collaborator organizations for resolving issues that may crop up from time to time during implementation. The PSC should meet quarterly. It will devise its own work procedures and may enter into a formal understanding, in the form of a Memorandum of Understanding, with lead and collaborator agencies for their commitment to implement the DTISU 2020 Programme.

4. **National Implementation Unit**
   The National Implementation Unit (NIU) under the Department of Trade is responsible for regular coordination, follow-up and monitoring of the DTISU 2020 Programme. The NIU reports to the head of the Department of Trade and functions as the Secretariat of the PSC.

5. **Sectoral Focal Officers**
   Designated SFOs (middle level) from major collaborator organizations and stakeholders report to their supervisors, participate in the PSC meetings and interact with NIU on a regular basis. The evaluation should be conducted midway through the implementation of the DTISU 2020 (2023 coinciding with the end of the 12th FYP), and another one in 2027 when the long-term recommendations would be expected to have been implemented. The midway review will provide a valuable opportunity to improve and/or modify the course of implementation to ensure that the projects achieve their objectives.
Who should perform the two evaluations? The first can be done in-house, that is, by the PSC 2020 but with the involvement of Department of Public Accounts, as necessary. The evaluation in 2027 should be independent using the Evaluation Association of Bhutan (EAB), a CSO, with specialized expertise in the field. Otherwise, an external evaluator may be needed. The NIU, DoI, acting as the PSC 2020 Secretariat, should ensure that a sufficient budget is provided for the two cycles of evaluation, which should generate two reports, which are transparent and accessible to all stakeholders. The review in 2027 would be well-timed as Bhutan would have completed its three-year grace period from its graduation from LDC status. The MoEA should provide a sufficient budget for the above evaluations in the corresponding fiscal years.

10.6 Conclusion

Four main subjects have been covered in this paper: a review of DTIS 2012, the DTISU 2020 CAM, potential sources of funding to implement the recommendations, and the proposed M&E mechanism for DTISU 2020.

More than eight years have passed since the launch of DTIS 2012. The initiative to prepare DTIS 2012 was taken by the DoT with a view to mainstream trade in the country’s development agenda as well as to expand and diversify exports. However, due to the nature of the issue, there were many stakeholders in both the public and private sectors whose cooperation and active involvement were required for its success.

More than 200 activities were proposed for implementation in the short-, medium- and long-term periods. Proponents of DTIS 2012 were overly optimistic that a significant number of activities could be executed by several organizations. Though the conduct of a review earlier on would have improved its success rate, it is not too late to carry out a general review exercise in 2021.

An assessment of the DTIS 2012 shows that the success rate is modest at 40 percent. This can be attributed to an absence of a built-in mechanism for active follow-up, a lack of interagency coordination, devising an overambitious workplan and shifting priorities and a lack of evaluation of DTIS 2012. These findings offer valuable lessons for the new DTISU 2020 Programme.

Notwithstanding the above, trade issues—particularly exports diversification, quality testing and certification of exportable products, and trade facilitation—have acquired greater significance since the 12th FYP and more recently, due to the COVID-19 pandemic. The DTISU 2020 can only strengthen the ongoing process to enhance the contribution of trade to the national economy.

The nine chapters under DTISU 2020 propose a total of 98 measures for implementation between 2021 and 2027, or by 2030 at the latest. Roughly 61 percent of these activities are proposed for implementation in the short run, within the 12th FYP period. Such an effort will alleviate the negative impacts of the COVID-19 pandemic that have not only forced the RGoB to reprioritize the 12th FYP but also made CSMLs and trade pivotal for GDP growth in the near future.

The proposed measures are extensive, ranging from policy reforms to join the WTO and the Trade Facilitation Agreement under it as well as the World Association of Investment Promotion Agencies (WAIPA), establish a one-stop border control facility at Phuentsholing, develop a national logistics master plan, formulate a new export promotion strategy, create new financing instruments for CSMLs, improve the business and investment climate, establish an export processing centre, establish Mutual Recognition Agreements (MRAs) on product
testing and certification to a range of other items aimed at training and institutional capacity-building. The development of tourism services and the ICT sector including e-Commerce are other salient recommendations for accelerated economic growth and development during the 2020 decade.

The budget for implementation of the DTISU 2020 Consolidated Action Matrix is estimated at US$44.45 million, or BTN 3.37 billion. This amount is modest given the scope of the recommendations and the impact that they can create on the economy. The identified sources of funding are both external and internal with the latter assuming greater relevance as Bhutan graduates from LDC status in 2023. The RGoB will be pushed to mobilize more resources from its internal sources, such as banks and other financial instruments, and use innovative approaches like trust funds, treasury bills and public bonds. Regardless of this milestone, it is expected that Bhutan’s traditional development partners will continue to support it on its development journey.

Finally, a modality has been suggested for the implementation of DTISU 2020, its follow-up and coordination as well as monitoring and evaluation. The MoEA will be the national lead agency to execute the programme, with support of the PSC 2020 under the Department of Trade. In other words, the MoEA will own DTISU 2020. The existing government mechanism as outlined in Section 10.5.2 above will be used for regular monitoring with two independent evaluations during the course of DTISU 2020. This will assure more robust outcomes of DTISU 2020 compared to its predecessor.
References


**Chapter 1: Review of trade performance, LDC graduation and WTO accession**

Lead implementing agency: Department of Trade (DoT), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.01. Join WTO</td>
<td>Creating business and investment friendly environment, and promoting exports (under NKRA 2)</td>
<td>DMEA, GNHC, BCCI, and other business sector associations</td>
<td>Short-term (2021–2023)</td>
<td>0.20</td>
<td>RGoB, EU, WTO, UN system</td>
</tr>
<tr>
<td>1.02. Proactive engagement with private sector</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>BCCI and other business/industry sector associations</td>
<td>As above</td>
<td>Regular meetings between RGoB and private sector for consultations. No extra budget foreseen</td>
<td>RGoB</td>
</tr>
<tr>
<td>1.03. Trade policy awareness and business facilitation programmes</td>
<td>As above</td>
<td>APIC, BCCI and other business sector associations</td>
<td>As above</td>
<td>In-kind support/trainings on needs basis</td>
<td>ESCAP, UNCTAD</td>
</tr>
</tbody>
</table>

**Sub-total: 3 projects (ST 3, LT 0)**

$0.20 mil. (ST 0.20m, LT 0m)
### Chapter 2: Skills gaps, upskilling, women’s and youth employment

#### Lead implementing agency: Department of Cottage and Small Industry (DCSI), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>Collaborator agencies</th>
<th>12th FYP outputs</th>
<th>Potential financing source</th>
<th>Budget estimate (USD million)</th>
<th>Time-frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.01. Create sector skill council/occupation group, capacity-building and institute linkage with external institutions to better understand skills development</td>
<td>MoLHR, RUB, BCCI</td>
<td>Promote innovation and entrepreneurship (under NKRA 7)</td>
<td>WB</td>
<td>0.26</td>
<td>Long-term (2024–2030)</td>
</tr>
<tr>
<td>2.02. Establish skills partnership in industrial zones/clusters with post-secondary institutions (establish partnerships specific to skills with higher institutions, e.g. ICT with GCIT, Business Start-up Centre or EPZ with College of Business Studies, Gaedu, etc.)</td>
<td>RUB, PPD (MoLHR)</td>
<td>As above</td>
<td>RGoB</td>
<td>0.06</td>
<td>Short-term (2022–2023)</td>
</tr>
<tr>
<td>2.03. Study and develop financial instrument for CSIs</td>
<td>RMA, BCCI, PPD (MoLHR), DMEA</td>
<td>Create productive and gainful employment (under NKRA 11)</td>
<td>12th FYP</td>
<td>0.05</td>
<td>Short-term (2021–2023)</td>
</tr>
<tr>
<td>2.04. Strengthen quality assurance of training providers</td>
<td>PPD (MoLHR), DTE, BCCI, RIM, RUB</td>
<td>Public service delivery enhancement programme (under NKRA 9)</td>
<td>12th FYP</td>
<td>0.05</td>
<td>Short-term (2021–2023)</td>
</tr>
<tr>
<td>2.05. Conduct training for women in a male-dominated sectors such as technical, ICT and mobile repairs services</td>
<td>DTE, RUB, NCWC, BCCI</td>
<td>Enhancing gender equality (under NKRA 10)</td>
<td>Business Start-up and CSI Flagship Programme</td>
<td>0.06</td>
<td>Short-term (2024–2026)</td>
</tr>
<tr>
<td>2.06. Promote skills development programmes to CSIs and exporter companies</td>
<td>BCCI, PPD (MoLHR)</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>As above</td>
<td>0.04</td>
<td>Short-term</td>
</tr>
<tr>
<td>2.07. Improve infrastructure and R&amp;D in education institutions for skills development</td>
<td>Transform TVET (under NKRA 8)</td>
<td>MoE, GNHC, RUB</td>
<td>(2021–2023)</td>
<td>2.66</td>
<td>As above</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>2.08. Develop skills enhancement plans and procedures for CSIs and exporter companies</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>BCCI, TCB</td>
<td>Long-term (2024–2030)</td>
<td>0.04</td>
<td>12th FYP</td>
</tr>
<tr>
<td>2.09. Draft guidelines and strategy to establish a dialogue with policymakers to allow the private sector to engage in the formulation of the FYP so that avenues are created for investment in skills training with inclusion of PPP models</td>
<td>As above</td>
<td>DMEA, (PPD) MoLHR, BCCI</td>
<td>Long-term (2025–2030)</td>
<td>0.04</td>
<td>WB</td>
</tr>
<tr>
<td>2.10. Institute Academy of Construction in JNCE</td>
<td>Pursue green growth in the construction sector (NKRA 15)</td>
<td>MoE, RUB, CDB</td>
<td>Long-term (2024–2030)</td>
<td>4.00</td>
<td>ADB</td>
</tr>
<tr>
<td>2.11. Conduct training programme for exporter companies, CSIs and digital skills programme for the youth</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BCCI and business/industry sector associations</td>
<td>Short-term (2012–2023)</td>
<td>0.21</td>
<td>UNDP</td>
</tr>
</tbody>
</table>

**Sub-total: 11 projects (ST 6, LT 5)**

$ 7.47 mil. (ST $0.47m, LT 7.00m)
## Chapter 3: Trade facilitation, transport and logistics

Lead implementing agency: Department of Trade (DoT), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.01. Accede to WTO TFA</td>
<td>Promoting exports (under NKRA 2)</td>
<td>DRC, BAFRA, BEA and ABI</td>
<td>Short-term (2021–2023)</td>
<td>0.10</td>
<td>RGoB EU WTO UN system</td>
</tr>
<tr>
<td>3.02. Establish authorized economic operator and trusted trader programmes</td>
<td>As above</td>
<td>DRC</td>
<td>As above</td>
<td>0.05</td>
<td>RGoB WB WCO</td>
</tr>
<tr>
<td>3.03. Finalize protocols to the Transit Agreement with Bangladesh</td>
<td>As above</td>
<td>DRC</td>
<td>As above</td>
<td>0.05</td>
<td>RGoB ADB WB</td>
</tr>
<tr>
<td>3.04. Review Transit Agreement with India</td>
<td>As above</td>
<td>DRC</td>
<td>As above</td>
<td>0.05</td>
<td>As above</td>
</tr>
<tr>
<td>3.05. Develop containerized transit transport (pilot)</td>
<td>As above; Safe, reliable, eco-friendly and sustainable surface transport (under NKRA 9)</td>
<td>DRC and BCCI</td>
<td>As above</td>
<td>0.05</td>
<td>ADB WB</td>
</tr>
<tr>
<td>3.06. Organise vocational training for drivers and other handling labour</td>
<td>Transform TVET and promote innovations and entrepreneurship (under NKRA 7)</td>
<td>DRC and BCCI</td>
<td>Long-term (2024–2030)</td>
<td>0.05</td>
<td>RGoB EU</td>
</tr>
<tr>
<td>3.07. Develop a National Logistics Master Plan</td>
<td>Promoting exports (under NKRA 2) and value chain enterprise development (under NKRA 8)</td>
<td>(PPD) MoIC, RSTA and BCCI</td>
<td>As above</td>
<td>0.20</td>
<td>ADB WB</td>
</tr>
<tr>
<td>3.08. Establish one-stop border control</td>
<td>Government performance management and public service delivery enhancement programme (under NKRA 9)</td>
<td>DLO (MoHCA)</td>
<td>As above</td>
<td>5.00</td>
<td>RGoB ADB WB</td>
</tr>
</tbody>
</table>
### Chapter 4: Business climate, CSI development and access to finance

Lead implementing agency: Department of Cottage and Small Industries (DCSI), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
</table>
| 4.01. Strengthening business and investment climate for MSME  
4.01.01. Data collection and classification of micro, small and medium enterprises  
4.01.02. Establish a business support centre to provide services to MSMEs in business plan preparation, financial planning, HR planning | Enhancing economic growth through sector diversification (under NKRA 2)  
Government performance management and public service delivery enhancement programme (under NKRA 9), 12th FYP, and business start-up and CSI Flagship Programme | NSB  
BCCI  
MoFA  
DoI | Short-term (2021–2023) | 0.80 | RGoB  
UNCTAD  
ITC |
| 4.02. Promote services and wholesale and retail trade sectors  
4.02.01. Assist services, retail and wholesale enterprises through training, facilitate access to finance and other support services  
4.02.02. Provide working capital soft loan for retail trade sectors or export guarantees | Enhancing economic growth through sector diversification (under NKRA 2)  
Create productive and gainful employment (under NKRA 11) | RMA  
FIAB  
BCCI and business sector associations including BAOWE | Short-term (2021–2023) | 0.61 | Gov  
ESCAP  
ITC  
EU |

Sub-total: 9 projects  
(ST 5, LT 4)  

- $ 5.75 mil. (ST 0.30m, LT 5.45m)
<p>| 4.03. Establish an export processing centre 4.03.01. Establish an export processing unit in the existing industrial estates that can be jointly used by MSMEs, providing customized packaging, labelling services near the borders in Pasakha, Phuentsholing and Gelephu 4.03.02. Change the National Post-harvest processing centre in Paro near the Paro International Airport under the DAMC into an export processing unit | Promoting exports and enhancing economic growth through sector diversification (under NKRA 2) Create productive and gainful employment (under NKRA 11) | DAMC | Long-term (2021–2025) | 0.93 | 12th FYP ADB GoI |
| 4.04. Privatization of trade infrastructure (industrial estates, CSI estates, start-up centres) 4.04.01. Auction out the long-term lease of trade infrastructure for management services to improve efficient delivery of services and cut costs 4.04.02. Large industrial estates leased to DHI, Start-up Centres and CSI estates may attract regional FDI | Government performance management and public service delivery enhancement programme (under NKRA 9) Enhancing economic growth through sector diversification (under NKRA 2) | DHI BCCI and business sector associations including BAOWE | Long-term (2023–2025) | 0.40 | 12th FYP DHI GoI |
| 4.05. Enable National CSI Development Bank Ltd. to be a deposit bank and facilitate digital e-Payments and data collection for collateral for micro and small enterprises 4.05.01. Promote FinTech and digital-based financial services | Enhancing economic growth through sector diversification (under NKRA 2) and create productive and gainful employment (under NKRA 11) | RMA National CSI Bank Ltd. FIAB | Short-term (2021–2023) | 0.27 | RGoB |</p>
<table>
<thead>
<tr>
<th>4.06. Hand over Institute of Traditional Crafts (Zorig Chusum) to Agency for the Promotion of Indigenous Crafts</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.06.01. Outline a clear strategic plan on areas of product diversification</td>
</tr>
<tr>
<td>Enhancing economic growth through sector diversification (under NKRA 2) Create productive and gainful employment (under NKRA 11)</td>
</tr>
<tr>
<td>DTE (MoLHR)</td>
</tr>
<tr>
<td>Long-term (2023–2025)</td>
</tr>
<tr>
<td>0.19</td>
</tr>
<tr>
<td>Business Start-up and CSI Flagship Programme RGoB</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.07. Export policy support and existing Government policy incentives for MSME awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.07.01. Training in export policy, guidelines and procedures for different markets</td>
</tr>
<tr>
<td>4.07.02. Training on e-Commerce platform guidelines, usage, and digital platforms</td>
</tr>
<tr>
<td>4.07.03. Training in business development for existing artisans and encourage formalization and registration of informal businesses</td>
</tr>
<tr>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
</tr>
<tr>
<td>BCCI and business sector associations including BAOWE</td>
</tr>
<tr>
<td>Short-term (2021–2023)</td>
</tr>
<tr>
<td>0.40</td>
</tr>
<tr>
<td>12th FYP ESCAP UNIDO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.08 HR capacity training for staff for private sector development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhancing economic growth through sector diversification (under NKRA 2) Create productive and gainful employment (under NKRA 11)</td>
</tr>
<tr>
<td>BCCI and business sector associations including BAOWE</td>
</tr>
<tr>
<td>Short-term (2021–2023)</td>
</tr>
<tr>
<td>0.27</td>
</tr>
<tr>
<td>ESCAP ITC EU UNCTAD</td>
</tr>
</tbody>
</table>

**Sub-total: 14 projects (ST 8, LT 6)**

$3.87 mil. (ST 1.95m, LT 1.92m)
## Chapter 5: Quality infrastructure system

Lead implementing agency: Department of Trade (DoT), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.01. Initiate bilateral negotiations to upgrade border facilities such as cold storage and dryer facilities</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>DoT, DRC FCB, DAMC/Department of Agriculture (DoA)</td>
<td>Short-term (2021–2023)</td>
<td>1.00</td>
<td>RGoB, GoI</td>
</tr>
<tr>
<td>5.02. Facilitate discussions between standards bodies and regulators</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB, BAFRA, NEC, DCSI, DoI, DoT, OCP</td>
<td>As above</td>
<td>0.25</td>
<td>As above</td>
</tr>
<tr>
<td>5.03. Establish national framework for CSI product standardization and certification</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB, BAFRA, DCSI, APIC, DoI, IPD</td>
<td>As above</td>
<td>0.50</td>
<td>ADB under MSME Project</td>
</tr>
<tr>
<td>5.04. Promote targeted training and capacity-building on standards, quality compliance, branding and packaging</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB, BAFRA, DCSI, DoI, DoT</td>
<td>As above</td>
<td>0.25</td>
<td>ADB under MSME Project</td>
</tr>
<tr>
<td>5.05. Establish Mutual Recognition Agreements (MRA) with major trading partners</td>
<td>Promoting exports (under NKRA 2)</td>
<td>MoEA, BAFRA, BSB</td>
<td>As above</td>
<td>0.25</td>
<td>RGoB, ADB (Priority)</td>
</tr>
<tr>
<td>5.06. Strengthen TBT Enquiry Point (capacity development)</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB</td>
<td>Long-term (2021–2026)</td>
<td>0.10</td>
<td>UNIDO, UNCTAD</td>
</tr>
<tr>
<td>5.07. Accreditation of product testing laboratory</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB</td>
<td>As above</td>
<td>0.50</td>
<td>UNIDO, UNCTAD</td>
</tr>
<tr>
<td>5.08. Increase scope of accreditation for product certification (capacity development)</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB</td>
<td>As above</td>
<td>0.25</td>
<td>RGoB</td>
</tr>
<tr>
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<td>---</td>
</tr>
<tr>
<td>5.09. Establish Mutual Recognition Agreements (MRA) with food regulators of potential markets</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BAFRA</td>
<td>As above</td>
<td>0.05</td>
<td>RGoB (Priority)</td>
</tr>
<tr>
<td>5.10. Capacity development of NFTL (equipment and human resource and increase scope of accreditation)</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BAFRA</td>
<td>As above</td>
<td>1.00</td>
<td>RGoB (Priority)</td>
</tr>
<tr>
<td>5.11. Strengthen SPS Enquiry Point through capacity development</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BAFRA</td>
<td>As above</td>
<td>0.10</td>
<td>UNIDO</td>
</tr>
<tr>
<td>5.12. Support private sector (SMEs) to develop Quality Manuals and SOPs</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>BCCI and industry associations</td>
<td>As above</td>
<td>0.75</td>
<td>RGoB</td>
</tr>
<tr>
<td>5.13. Conduct SMTQ awareness campaign to SMEs on conformity assessment</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BCCI and industry associations</td>
<td>As above</td>
<td>0.30</td>
<td>As above</td>
</tr>
<tr>
<td>5.14. Awareness and promotion of system standards related to trade facilitation</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB</td>
<td>Short-term (2021–2023)</td>
<td>0.03</td>
<td>UNIDO/UNCTAD</td>
</tr>
<tr>
<td>5.15. Finalization and implementation of National Quality Policy</td>
<td>Promoting exports (under NKRA 2)</td>
<td>BSB</td>
<td>As above</td>
<td>0.03</td>
<td>UNIDO/UNCTAD</td>
</tr>
</tbody>
</table>

**Sub-total: 15 projects (ST 7, LT 8)**

$5.36 mil. (ST 2.21, LT 3.05)
## Chapter 6: Trade diversification

Lead implementing agency: Department of Trade (DoT), MoEA

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.01. Formulate Mid-term Export Strategy (and implementation)</td>
<td>Promoting exports (under NKRA 2)</td>
<td>GNHC, DRC</td>
<td>Long-term (2024–2030)</td>
<td>Policy formulation by government research and organizing stakeholders consultations 0.02</td>
<td>EIF, ITC</td>
</tr>
<tr>
<td>6.02. Increase and diversify exports</td>
<td>As above</td>
<td>DoI, DCSI, GNHC</td>
<td>Long-term (2024–2030)</td>
<td>No cost</td>
<td>ESCAP</td>
</tr>
<tr>
<td>6.03. Focus on niche and high-value products, including the identification of products and markets</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>DIP, DCSI, DoA, DAMC</td>
<td>Long-term (2024–2030)</td>
<td>0.05</td>
<td>UNIDO, ITC, EIF</td>
</tr>
<tr>
<td>6.04. Export data improvement programme</td>
<td>Promoting exports (under NKRA 2)</td>
<td>DoI</td>
<td>Long-term (2024–2030)</td>
<td>0.05</td>
<td>ITC, EIF</td>
</tr>
<tr>
<td>6.05. Linkages development, including identification of specific industries and internal markets.</td>
<td>Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>DoT, DoI, DIP, DCSI</td>
<td>Long-term (2024–2030)</td>
<td>0.10</td>
<td>UNCTAD</td>
</tr>
</tbody>
</table>

**Sub-total: 5 projects (ST 0, LT 5)**

$ 0.22 	ext{ mil. (ST 0.22m, LT 0m)}$
<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>Time-frame</th>
<th>Collaborator agencies</th>
<th>Potential financing source</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.01. Training in use of Brand Bhutan and promote innovation and entrepreneurship (under NKRA 7)</td>
<td>Long-term (2021–2030)</td>
<td>GNHC, DIM</td>
<td>EIF, ITC</td>
<td>0.05</td>
<td>EIF, ITC</td>
</tr>
<tr>
<td>7.02. Full launch strategy and communications plan for Brand Bhutan Promoting exports (under NKRA 2)</td>
<td>Short-term (2021–2023)</td>
<td>MoEA, GNHC, DIM, MoFA, DMA</td>
<td>EIF, ITC</td>
<td>0.10</td>
<td>EIF, ITC</td>
</tr>
<tr>
<td>7.03. Combined with above, develop communications plan for LDC graduation Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>As above</td>
<td>GNHC, DIM</td>
<td>EIF</td>
<td>0.025</td>
<td>EIF, ITC</td>
</tr>
<tr>
<td>7.04. Consider establishing an Economic Development Board Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>Long-term (2021–2030)</td>
<td>GNHC, MoEA, MoF, Cabinet, RCSC</td>
<td>UNCTAD</td>
<td>0.10</td>
<td>UNCTAD and possibly WAIPA</td>
</tr>
<tr>
<td>7.05. Investor targeting and aftercare programme Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>Short-term (2021–2023)</td>
<td>DOI, MFA (Missions Abroad)</td>
<td>EIF, UNCTAD and possibly WAIPA</td>
<td>As above</td>
<td>UNCTAD and possibly WAIPA</td>
</tr>
<tr>
<td>7.06. Improve accuracy of FDI statistics and harmonize with international data Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>Short-term (2021–2023)</td>
<td>MoF, RMA</td>
<td>UNCTAD and possibly WAIPA</td>
<td>0.05</td>
<td>EIF, UNCTAD and possibly WAIPA</td>
</tr>
<tr>
<td>7.07. Join WAIPA Enhancing economic growth through sector diversification (under NKRA 2)</td>
<td>As above</td>
<td>MoF, Cabinet, MFA</td>
<td>UNCTAD and possibly WAIPA</td>
<td>0.015 (annual membership fee for three years)</td>
<td>RGoB</td>
</tr>
</tbody>
</table>

Sub-total: 7 projects (St 4, LT 3) $0.44 mil. (ST 0.19m, LT 0.25m)
Chapter 8: Tourism support services

Lead implementing agency: Tourism Council of Bhutan (TCB)

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.01. Capacity development of tourism personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.01.01. Provide training to the private sector in the following areas: marketing and packaging, ticketing and reservations, logistics coordination, service delivery for hotels and guides, finance and budget, and communication skills</td>
<td>Enhance equity and quality education (under NKRA 7) and create productive and gainful employment (under NKRA 11)</td>
<td>Tourism sector associations</td>
<td>Long-term (2024–2030)</td>
<td>6.67</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.01.02. Provide training to government officials on destination management and marketing and promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.01.03. Implement strong certification system for service providers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.02. Efficient booking system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.02.01. Support tour payments for all major convertible currencies</td>
<td>Digital transformation and innovation in use of ICT (under NKRA 9)</td>
<td>RMA, banks</td>
<td>Short-term (2021–2023)</td>
<td>0/067</td>
<td>12th FYP Tourism Flagship Programme RMA</td>
</tr>
<tr>
<td>8.02.02. Allow foreign currency accounts for all tourism business entities</td>
<td></td>
<td>Tourism sector associations</td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>8.02.03. Simplify the online payment gateway system to promote card payments: System integration with Government and other agencies (e.g. DoI, DCRC, DRC, DOT, financial institutions, airlines, etc.)</td>
<td></td>
<td></td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>8.02.04. Mobile app development for tourism services and information</td>
<td></td>
<td></td>
<td></td>
<td>0.04</td>
<td></td>
</tr>
<tr>
<td>8.02.05. Initiate IT disaster recovery plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.02.06. Revamping of industry and destination website</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Details</td>
<td>Organization(s)</td>
<td>Timeframe</td>
<td>Percentage</td>
<td>FYP</td>
</tr>
<tr>
<td>---------</td>
<td>---------</td>
<td>-----------------</td>
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</tr>
<tr>
<td>8.03.01</td>
<td>Facilitate regular consultations and meetings between representatives of tourism associations (ABTO, HRAB, GAB) and other sectors from agriculture, manufacturing, IT, and the creative industry</td>
<td></td>
<td>Short-term (2021–2023)</td>
<td>0.27</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.03.02</td>
<td>Invest in productive capacity of CSI businesses in agriculture, manufacturing, and service sectors to meet the demands of the tourism sector</td>
<td></td>
<td>Short-term (2021–2023)</td>
<td>0.04</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.04.01</td>
<td>Establish an independent national committee to overlook marketing activities</td>
<td>PMO, GNHC, tourism sector associations</td>
<td>Short-term (2021–2023)</td>
<td>0.04</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.04.02</td>
<td>Develop a strong national digital marketing strategy</td>
<td>DITT, tourism sector associations</td>
<td>Short-term (2021–2023)</td>
<td>0.13</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.05.01</td>
<td>Identify and develop USPs for each district/region</td>
<td>Tourism sector associations, GNHC</td>
<td>Short-term (2021–2023)</td>
<td>0.27</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.05.02</td>
<td>Conduct R&amp;D for content development suited for different market segments</td>
<td>Tourism sector associations</td>
<td>Long-term (2024–2030)</td>
<td>0.67</td>
<td>12th FYP</td>
</tr>
<tr>
<td>8.05.03</td>
<td>Develop and promote packages and infrastructure for domestic tourism</td>
<td>Tourism sector associations</td>
<td>Short-term (2021–2023)</td>
<td>0.67</td>
<td>12th FYP</td>
</tr>
</tbody>
</table>
### 8.06. Strategic product diversification

#### 8.06.01. Outline a clear strategic plan on areas of product diversification, with inclusion of PPP models

- Enhancing economic growth under sector diversification, and promoting exports (under NKRA 2):
- Sustenance and continuity of cultural heritage (under NKRA 4) and sustainable natural resource management and utilization (under NKRA 5)
- Tourism sector associations, DoC (MoHCA), MoAF
- Tourism sector associations, DLG/DoC (MoHCA)
- Tourism sector associations
- Short-term (2021–2023)
- As above
- Long-term (2024–2030)

#### 8.06.02. Identify strategies to position Bhutan as a health and wellness destination, including flexible MDP rates and development of wellbeing service infrastructure

- Promoting exports (under NKRA 2), and reducing poverty and inequality (NKRA 3)
- PPD (MoF), PPD (MoEA), GNHC
- Short-term (2021–2023)

#### 8.06.03. Improve the MICE infrastructure by building an international standard convention centre, and facilitate MICE tourism through easing of regulations

- Enhancing economic growth under sector diversification (under NKRA 2)
- PPD (MoEA), GNHC, BCCI, tourism sector associations
- As above

### 8.07. Uniform seasonal pricing: Conduct a comprehensive study on the rationalization of the high/low seasonal price differentiation

- Promoting exports (under NKRA 2), and reducing poverty and inequality (NKRA 3)
- PPD (MoF), PPD (MoEA), GNHC
- Short-term (2021–2023)

### 8.08. Study on tariff model: Conduct a comprehensive study on the impact of liberalization of SDF and/or MDPR structure

- Enhancing economic growth under sector diversification (under NKRA 2)
- PPD (MoEA), GNHC, BCCI, tourism sector associations
- As above

**Sub-total: 21 projects (ST 17, LT 4)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Details</th>
<th>Duration</th>
<th>FYP</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.06. Strategic product diversification</td>
<td>Enhancing economic growth under sector diversification, and promoting exports (under NKRA 2); sustenance and continuity of cultural heritage (under NKRA 4) and sustainable natural resource management and utilization (under NKRA 5)</td>
<td>Short-term (2021–2023)</td>
<td>0.04</td>
</tr>
<tr>
<td>8.06.02. Identify strategies to position Bhutan as a health and wellness destination, including flexible MDP rates and development of wellbeing service infrastructure</td>
<td>Promoting exports (under NKRA 2), and reducing poverty and inequality (NKRA 3)</td>
<td>Short-term (2021–2023)</td>
<td>0.04</td>
</tr>
<tr>
<td>8.06.03. Improve the MICE infrastructure by building an international standard convention centre, and facilitate MICE tourism through easing of regulations</td>
<td>Enhancing economic growth under sector diversification (under NKRA 2)</td>
<td>As above</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Sub-total: 21 projects (ST 17, LT 4)</strong></td>
<td></td>
<td></td>
<td>$10.70 mil. (ST 1.76m, LT 8.94m)</td>
</tr>
</tbody>
</table>

**12th FYP Tourism Flagship Programme**
### Chapter 9: Digitalization, e-Commerce and Industry 4.0

Lead implementing agency: Department of Trade (DoT), MoEA in cooperation with the Department of Information Technology and Telecom (DITT)

<table>
<thead>
<tr>
<th>Actions/measures (as a Project #)</th>
<th>12th FYP outputs</th>
<th>Collaborator agencies</th>
<th>Time-frame</th>
<th>Budget estimate (USD million)</th>
<th>Potential financing source</th>
</tr>
</thead>
</table>
| 9.01. Promoting trade through e-Commerce | Digital transformation and innovation in use of ICT (under NKRA 9)  
Complementary policy and guidelines on data management and security | RMA, MoIC, BCCI      | Short-term (2021–2023) | Formulating policies and disseminating information 0.10 | UNESCAP (building capacity of women entrepreneurs) EIF WB |
| 9.02. Developing “Digital Bhutan” initiative | Digital transformation and innovation in use of ICT (under NKRA 9) | MoIC, Bhutanese Banks, RUB, Business Associations | Short-term (2021–2023) | 0.90 | 12th FYP Digital Drukyul EIF UPU |
| 9.03. IT infrastructure dialogues and workshops with India and Bangladesh | Digital transformation and innovation in use of ICT (under NKRA 9) | PMO, MoIC          | Short-term (2021–2023) | 0.20 | ITU, ITC, UNIDO, UNCTAD, WB |
| 9.04. Introduce ICT facet into Brand Bhutan | Digital transformation and innovation in use of ICT (under NKRA 9)  
Economic diversity and productivity enhanced (under NKRA 2) | MoIC, MoEA, BCCI     | Short-term (2021–2023) | 0.10 | 12th FYP WTO EIF UNIDO WB |
<p>| 9.05. Development of digital financial incentives | Digital transformation and innovation in use of ICT (under NKRA 9) Macroeconomic stability ensured (NKRA 1) | MoEA MoF RMA Bhutanese banks | Short-term (2021–2024) | 0.48 | IMF WB Bhutanese banks |
| 9.06. Bhutan Industry 4.0 roadmap | Digital transformation and innovation in use of ICT (under NKRA 9) Economic diversity and productivity enhanced (under NKRA 2) | MoEA MoC Thimphu Tech Park BCCI RUB Research centres | Short-term (2021–2024) | 0.24 | UNIDO WB, BRI UNDP UNCTAD ITU |
| 9.07. Thimphu TechPark Expansion | Digital transformation and innovation in use of ICT (under NKRA 9) Economic diversity and productivity enhanced (under NKRA 2) | MoC Bhutanese Banks Business Associations RUB Research Centres | Long-term (2024–2027) | 5.00 | UNIDO ITU WB IMF RGoB Other international development partners |
| 9.08. Development of STEM programmes at the Royal University of Bhutan | Quality of education and skills improved (under NKRA 7) | MoC MoE RUB | Short-term (2021–2023) | 0.14 | UNIDO UNESCO UNCTAD ITU WB |</p>
<table>
<thead>
<tr>
<th>9.10. ICT equipment and skills development programme for schools</th>
<th>Digital transformation and innovation in use of ICT (under NKRA 9)</th>
<th>MoC MoE Schools in Thimphu</th>
<th>Short-term (2021–2024)</th>
<th>0.24</th>
<th>UNIDO ITU UNICEF WB WIPO UNESCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.11. Community centre e-Commerce and e-Procurement platforms</td>
<td>Digital transformation and innovation in use of ICT (under NKRA 9) Healthy ecosystem services maintained (under NKRA 5) Productive and gainful employment created (NKRA 11)</td>
<td>MoC MoE MoF Business associations</td>
<td>Short-term (2021–2024)</td>
<td>0.59</td>
<td>UNIDO UNCTAD ITU ITC UNESCO WB IMF Other international development partners</td>
</tr>
<tr>
<td>9.12. Scale up popular e-Commerce business</td>
<td>Economic diversity and productivity enhanced (NKRA 2)</td>
<td>MoC Business associations</td>
<td>Long-term (2023–2027)</td>
<td>0.85</td>
<td>UNIDO UNCTAD EIF WB Flipkart Amazon Myntra</td>
</tr>
<tr>
<td>9.13. Setting up dedicated urban rural e-Commerce platform</td>
<td>Digital transformation and innovation in use of ICT (under NKRA 9) Economic diversity and productivity enhanced (NKRA 2)</td>
<td>MoC MoEA Business associations (BAOWE to take the lead) Bhutanese banks Logistics providers</td>
<td>Short-term (2021–2022)</td>
<td>170</td>
<td>UNIDO UNCTAD EIF WB Flipkart Amazon Myntra</td>
</tr>
<tr>
<td><strong>Sub-total: 13 projects (ST 11, LT 2)</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>US$10.74 mil (ST 4.89m, LT 5.85m)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$ 44.45 mil.</strong></td>
<td></td>
</tr>
</tbody>
</table>
## ANNEX TO CHAPTER 10: IMPLEMENTATION REVIEW OF DTIS 2012

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Objectives</th>
<th>No. of Actions/ (Priority)</th>
<th>Implementation rate (estimate)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Macroeconomic policies</td>
<td>11. Seek out an optimal exchange rate policy, etc.</td>
<td>1 (M)</td>
<td>20</td>
<td>MoEA made a proposal in 2013 but there was no outcome, presumably due to a lack of support.</td>
</tr>
<tr>
<td></td>
<td>12. Seek better match between needs of economy and labour market</td>
<td>1 (H)</td>
<td>50</td>
<td>No expert group was formed to study increase in intakes in tertiary education; however, total intake capacity in this subsector increased to 58.5 percent but annual intake in engineering and business studies increased to 40.5 percent only; TVET enrolment increased by 66 percent, and 18 new programmes were launched; labour market info guide prepared for college students.</td>
</tr>
<tr>
<td></td>
<td>13. Improve data on trade and FDI</td>
<td>3 (H)</td>
<td>40</td>
<td>Some progress made on capturing data and doing analysis on FDI; no system to track informal trade nor to harmonize data between DoI and RMA; Participation by MoEA personnel in a few capacity-building activities (e.g. investment law and EDB for FDI attraction).</td>
</tr>
<tr>
<td></td>
<td>14. Raise awareness on Dutch disease, etc.</td>
<td>2 (M)</td>
<td>0</td>
<td>Subject was talked about within the bureaucracy in the past, but awareness has been created on it.</td>
</tr>
<tr>
<td></td>
<td>Sub-total</td>
<td></td>
<td>Sub-total</td>
<td>7 27.50</td>
</tr>
<tr>
<td>2. Private sector development</td>
<td>2.1. Entrepreneurship development</td>
<td>7 (H)</td>
<td>50</td>
<td>DCSI promoted entrepreneurship through CSMI policy since 2012 and CSI Strategy 2019; MoLHR implemented National Entrepreneurship Strategy since 2015; Gaedu College of Business Studies initiated research on youth employment through entrepreneurship and business incubation; as many as 15 agencies dealing with entrepreneurship promotion resulting in more outputs but also poor coordination.</td>
</tr>
</tbody>
</table>
### 2.2. Create enabling institutional framework for SMEs

<table>
<thead>
<tr>
<th>Activity</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several initiatives taken by RMA, MoF and MoEA in strengthening of institutions, legal and policy frameworks (EDP 2016, Priority Sector Lending Guidelines 2017, Fiscal Incentives Act 2017, Foreign Exchange Rules and Regulations 2018, Financial Inclusion Strategy 2019–2023, Guidelines on Rural Industry Development Scheme 2017, etc.); REDC transformed into a CSI Bank in 2019, micro-finance promoted, industrial infrastructure development progressed but no policy or action on it as yet though a Guideline exists; with introduction of GST in India, the excise refund issue may no longer be relevant; consultancy service unit/firm to offer services to SMEs not set up; DCSI start-up centre set up in Thimphu; MoLHR, DCSI, DHI and APIC offer training in entrepreneurship, business development and marketing</td>
<td>13 (H 10, M 3)</td>
<td>55</td>
<td></td>
</tr>
</tbody>
</table>

### 2.3. Promote value chain development

<table>
<thead>
<tr>
<th>Activity</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No visible progress; the COVID-19 situation underscores the need for value chain development as stressed by the Minister of Agriculture and Forests in Sept 2020</td>
<td>4 (H 2, M 2)</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

### Sub-total

| 2.2 and 2.3 | 24 | 38.33 |

### 3. Trade and investment policy and institution

<table>
<thead>
<tr>
<th>Activity</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI policy and rules and regulations revised and published in 2014, 2016, 2019 and 2020; FDI Application Guidelines published in 2019; New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards signed; investment strategy study completed in Spring 2020 along with a regulatory framework on FDI; no increase in FDI flows; no study done on ratifying international investment and dispute treaties.</td>
<td>5 (H)</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very limited progress. Started sales counter in Paro airport on processed agricultural and cottage industry products; a National Exports Strategy formulated; trade information and use of ICT strengthened; capacity development on trade enhanced; some training conducted for private sector products development and marketing; SEAL Bhutan for handicrafts and Brand Bhutan for 18 selected products promoted; IP policy launched in 2018; a Technology and Innovation Centre set up; no information on registration of geographical indications (GIs).</td>
<td>6 (H 4, M 2)</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>VH</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory progress including capacity-building, acquisition of equipment and placing of additional staff in NIU, DoT.</td>
<td>7 (VH)</td>
<td>65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>VH</th>
<th>H</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No very high and high priority activities implemented and hence very limited progress; Competition policy and Trade Act drafted but not approved as yet; trade mainstreaming neither a priority in 11th FYP nor discussed in 12th and 13th Round Table meetings.</td>
<td>18 (VH 9, H 6, M 3)</td>
<td>20</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>M</th>
<th>Sub-total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process of being set up; ESCAP offered a training programme.</td>
<td>1 (M)</td>
<td>15</td>
</tr>
<tr>
<td>19 (VH 2, H 8, M 9)</td>
<td>Limited progress.</td>
<td></td>
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<td>-------------------</td>
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<td></td>
</tr>
<tr>
<td><strong>3. Strengthen bilateral, regional and multilateral trade arrangements</strong></td>
<td><strong>3.7. Improve IPR framework</strong></td>
<td></td>
</tr>
<tr>
<td><strong>3.6. Strengthen bilateral, regional and multilateral trade arrangements</strong></td>
<td>37. Improve IPR framework</td>
<td></td>
</tr>
<tr>
<td><strong>4. Trade facilitation and logistics</strong></td>
<td><strong>4.1. Boost dry port operations and identify bottlenecks in clearance process</strong></td>
<td></td>
</tr>
<tr>
<td><strong>4.2. Ensure modern clearance process, etc.</strong></td>
<td><strong>4.3. Apply corridor approach for transit</strong></td>
<td></td>
</tr>
<tr>
<td>3.2. Ensure modern and efficient clearance process, etc.</td>
<td>4.3. Apply corridor approach for transit</td>
<td></td>
</tr>
<tr>
<td><strong>4.4. Develop logistic skills in the industry</strong></td>
<td><strong>4.5. Develop national capacity to certify organic products for exports</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5. Standards and Quality Infrastructure</strong></td>
<td><strong>5.1. Develop national capacity on biosecurity risks, etc.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5.2. Develop logistic skills in the industry</strong></td>
<td><strong>5.3. Develop national capacity to certify organic products for exports</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10</th>
<th>28.75</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>Sub-total</strong></td>
</tr>
</tbody>
</table>

- Trade Agreements with Bangladesh and India revised; Transit and PTA with Bangladesh negotiated but yet to be signed; Bhutan unable to make greater use of GSP and EBA provisions.
- BAFRA obtained certification for packaged drinking water, packaged natural mineral water and fruit juices; BAFRA’s role as a certifying body for organic products under organic products (herbal tea) identified.
- Bio-safety law (for imports) adopted; qualified human resources a challenge for BAFRA.

- Business Process Analysis (BPA), Time Release Studies (TRS) and Time-Cost-Distance (TCD) framework done in 2016 and reports published by ADB/ESCAP; mini dry port MDP constructed in Phuentsholing and is operational.
- eCMS being developed to replace BACS upon its launch planned in 2023; a draft guideline on risk management (RM) developed, DRC personnel trained in RM and draft guidelines developed on RM, storage facility provided in MDP.
- Feasibility study on use of inland waterways/riverine routes for bilateral trade with Bangladesh and transit cargo carried out in 2013; MoU with Bangladesh on use of Inland Waterways signed in 2017; use of riverine route for trade with Bangladesh tried but infrastructure not adequate on Bangladesh side; new entry exit routes for trade agreed with India and Bangladesh.
- Not implemented.
- Limited progress.
- Not implemented.
- 25
- 50
| 5.3. Strengthen analytical capability of food safety | 1 (H) | 35 | Limited progress; inadequate qualified personnel and equipment still a challenge. |
| 5.4. Strengthen plant/pest disease surveillance, etc. | 2 (L) | 50 | Pest surveillance section created in NPPC, Semtokha for plant protection services; a web-based e-Pest surveillance system developed. |
| 5.5. Strengthen MSTQ capability | 3 (VH, H, L) | 40 | SMEs Sector Development Project (ADB) and UNIDO helped to strengthen BSB capacity in MSTQ; new laboratory building not constructed but the facility being adjusted within BSB. |
| **Sub-total** | **11** | **40** | |

<p>| 6. Sectors, sub-sectors with export potential | |
| 6.1. Manufacturing (base metals and articles thereof, minerals, chemical products, agro-products and handicrafts) | 12 (H 8, M 4) | 30 | Road from Pasakha connected with Indian railway system; Highway NH33 in India improved and widened under ADB SASEC programme; internationally certified laboratory for quality testing of products not set up; some iron and non-ally steel products under HS heading 7206, 7207 and 7216 included in exportable items to Bangladesh in the 2014 bilateral Trade Agreement that could be negotiated for preferential tariff; no developments on reducing industrial pollution from industries in Pasakha; limited progress on industrial health and safety; GMP and HACCP systems being followed on food quality and safety; a number of water bottling plants established in private sector; greater focus given on improving traditional handicrafts. |
| 6.2. Agriculture (Citrus, cardamom, lemongrass, medicinal herbs and mushrooms, processing of non-timber forest products) | 20 (H 2, M 15, L 3) | 40 | Testing of diseases through tissue culture on crops being carried out; production and distribution of disease-free grafted seedlings of horticultural crops; limited progress on certifying and branding organic products for exports; some progress in developing food testing facilities and food safety measures; marginal progress in negotiating standards and mutual recognition of certificates with trading partners. |</p>
<table>
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<tr>
<th>6.3. Services (Tourism, ICT, Health and Education)</th>
<th>57 (H 38, M 14, L 5)</th>
<th>50</th>
<th>Fairly good progress under tourism: Issues of tourism being discussed in parliament and cabinet; tourism policy and guidelines constantly reviewed; Annual Tourism Monitor provides a wide range of statistics; better database for TCB with its Tashel online system; but more in-depth data still needed; awareness and briefing on tourism to high-level officials partly conducted; no initiative to develop reduced carbon footprint; product development lagged behind; no information on backward and forward linkages of tourism industry; oversupply of accommodation in western and central Bhutan. Modest progress under ICT: National fibre optic network developed; however, IT infrastructure gap between rural and urban communities still prevalent; no ITeS marketing plan developed nor increase of FDI in it; no significant advancement in IT Park Semtokha recently; ICT and Media Act 2006 revised; procurement process re-engineered including introduction of e-Procurement system in RGoB; not all community centres have access to reliable Internet and IT infrastructure.</th>
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<tbody>
<tr>
<td>Sub-total</td>
<td>89</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>201 (VH 23, H 103, M 64, L 11)</td>
<td>35%</td>
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Notes: VH: Very high priority, H: High priority, M: Medium priority, L: Low priority.